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ABSTRACT

A Manitoba survey examined child care use, child safety concerns, and parents' on-farm and off-farm work to determine the needs of farm families for child care services. Of 972 questionnaires mailed to Manitoba farm residences, 121 were returned by respondents who were actively farming and living on a farm with at least one child younger than 16 years. Most husbands and wives were full-time farmers; 19 percent of husbands and 35 percent of wives were regularly employed off the farm. Farm help was hired by 55 percent of respondents, mostly on a seasonal basis. Responding families included 294 children under age 16 (76 percent under 13). Child care was used regularly by 21 percent of families and was used during peak farm times (such as seeding or harvest time) by 55 percent. Child care was provided mostly by relatives, followed by older siblings and nonrelatives, but was never provided by a day care center. Alternatives to child care for 64 percent of farm families were to take the children along or to leave them alone while parents worked on the farm. In general, the greatest concerns for children's safety on farms related to augers, power take-off equipment, farm chemicals, and large machinery. Safety concerns varied with the number of hours parents worked on the farm and children's ages. Parents indicated the youngest age at which children could participate in various farm activities. Child care support preferred by farm families was either a caregiver in the farm home or hired farm help to free the wife for child care. Recommendations outline a model for rural child care services. Appendices elaborate on the model and include the survey questionnaire. (Author/SV)

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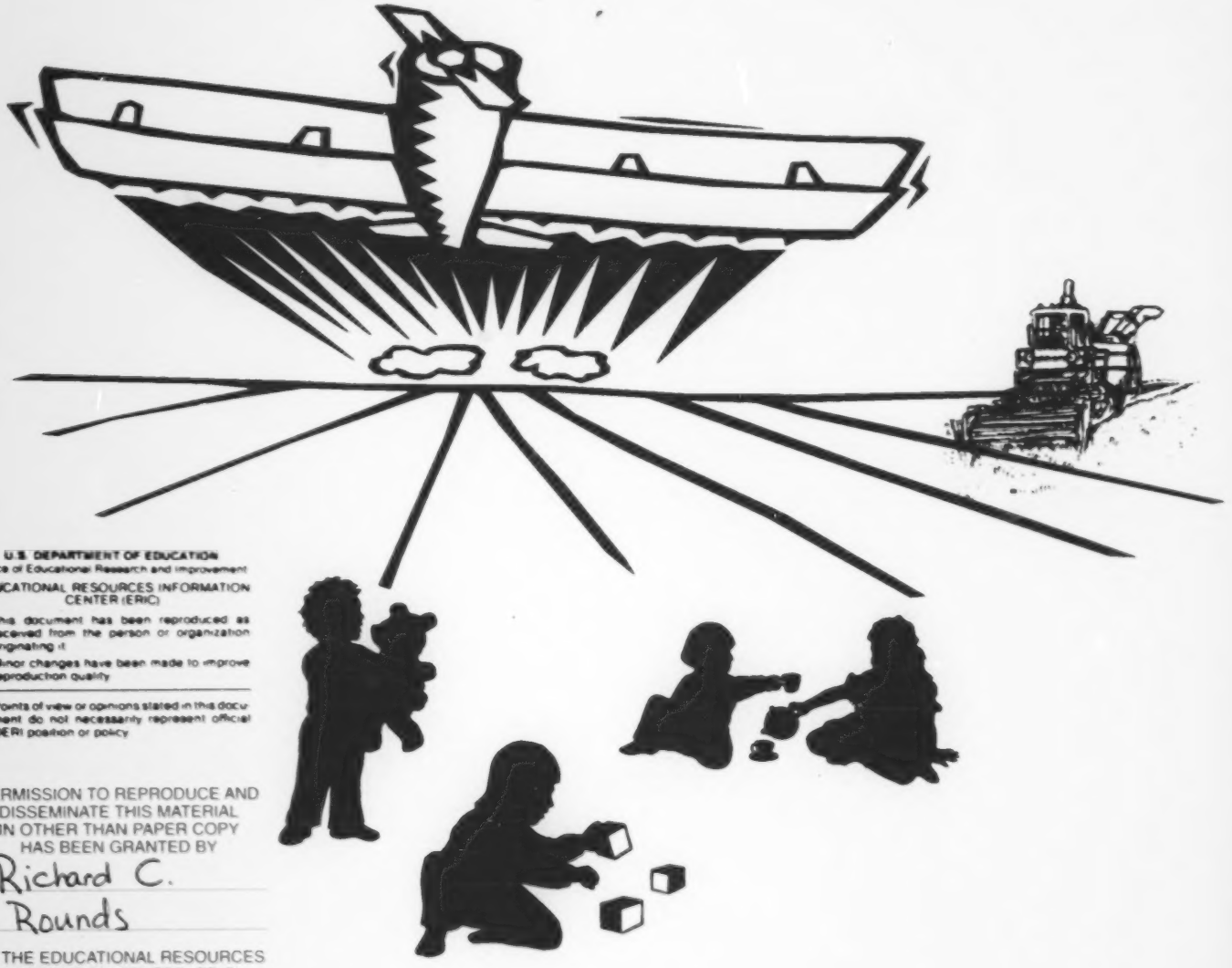
CHILD CARE AND CHILD SAFETY FOR FARM CHILDREN IN MANITOBA



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MANITOBA RURAL DEVELOPMENT

CHILD CARE AND CHILD SAFETY
FOR FARM CHILDREN IN MANITOBA

by

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Prepared for and funded by
Manitoba Rural Development

in cooperation with
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PREFACE

The changing demographics of the rural population compounded by changes in farm operations have increased the need for child care supports for farm families. The decrease in family size over the last half century and the retirement of the older generation of farmers to more urbanized centres leave many young farmers without the traditional child care supports of an extended family. The increasing mechanization of farm operations with ever larger and more automated equipment also changes the type of safety precautions that need to be taken for young children.

Relatively satisfactory child care options have been developed over the past several decades for working parents in urban settings. These child care services do not just fall short of meeting the needs of farm families, but they fail to recognize the nature of the farming industry and of the work patterns of the husband and wife operators of farms. This survey documents some of the work patterns of husband and wife farm operators who also have young families living on their workplace, describes how these farmers currently cope with being parents of young children while also being full-time operators of a farm, and recommends options for a rural model of child care services.

This report has been written for two audiences. One audience is the farming community, in particular, the farm families with young children with whom we wish to share the findings of this survey. The other audience includes researchers and policy advisors for whom it is hoped the information in this report will stimulate continued research and policy development that is supportive of child care and child safety for farm families. Statistical symbols such as t, p, df, and X^2 have been included for this second audience. However, the substance of the report can be read and understood without concern for these statistical terms.

The most important contributors to this study are the farmers, husbands and wives, who responded to the survey questionnaire. We sincerely thank them for their candidness and we hope this report accurately speaks for their concerns. The contribution of Jackie Wasney, who spent hours reading through Municipal Tax Rolls to randomly select families living on farms, is gratefully acknowledged. Thanks to Joan Rollheiser, Administrative Assistant to the Rural Development Institute, who most efficiently and accurately prepared the manuscript for publication. Dr. Richard Rounds, Director of the Rural Development Institute, was always there for consultation and provided moral support throughout this project. Thank you, Richard.

Marion Perrett, Lois Neabel and Joyce Johnson of the Manitoba Women's Institute not only suggested the project but also assisted along the way. MWI provided partial funding for the project.

Major funding was provided by Manitoba Rural Development. The Rural Development Institute receives on-going support from Manitoba Rural Development and Brandon University. We especially acknowledge the assistance of the Honourable Len Derkach, Minister of Rural Development, Winston Hodgins, Deputy Minister, Ron Riopka, Director, Corporate Planning and Business Development, and Bob Grodzik, Chief of Research. Dr. Susan Hunter-Harvey, Vice-President Academic and Research, assists RDI at Brandon University.

EXECUTIVE SUMMARY

The number of serious injuries and deaths of young children on farms is of increasing concern among farmers, governments and the agricultural community. Mechanization of farm operations, financial pressures on farm operators and lack of suitable child care supports have been identified as factors contributing to a farm environment that is unsafe for young children. This survey is designed to examine child care use, child safety concerns and the on- and off-farm work of parents with the objective of identifying child care services that could meet the unique needs of farm families.

Farm families in this survey have at least one child under 16 years of age, are actively farming and living on a farm in 1993. Given that only 36.6 percent of Manitoba farm families had children under 13 years in the 1991 Agricultural Census, the sample for this survey was selected as follows. First, rural municipalities with the highest proportion of families with children under 16 years were identified. From these, municipalities representing the agricultural regions and types of farming operations in the Province were identified. Finally, names and addresses of farm residences were randomly selected from the Manitoba Rural Municipality Assessment Rolls of the identified municipalities.

Questionnaires, designed to be returned anonymously, were sent to 972 farm residences followed by reminder postcards one week later. Excluding hobby farmers, the survey sample consists of 121 respondents who are actively farming and living on the farm with at least one child younger than 16 years. Small and large farms are equally represented, 30 percent of farm operations are crops only and 70 percent include livestock. Sixty-four percent of the respondents derive more than 75 percent of their family income from farming.

The majority of husbands (61 percent) and wives (55 percent) are full-time farmers; 19 percent of husbands and 35 percent of wives are regularly employed off the farm and 21 percent of husbands and 12 percent of wives work off the farm on a casual basis. Husbands employed off the farm generally hold full-time jobs; most wives hold part-time jobs. Help is hired by 55 percent of the respondents, most (88 percent) on a seasonal basis.

In total, there are 294 children under 16 years in the responding families, 76 percent of whom are under 13 years. Regular child care is used by 21 percent of the families, 75 percent of which is provided by a relative, neighbour, friend or babysitter in the caregiver's home. Regular child care is used primarily by families who obtain 75 percent or less of their net income from farming. During peak times, 55 percent of farm families use child care provided most frequently by relatives and almost as often by older siblings. Some peak time child care is provided by non-relatives but never by a day care centre. Families with one to three children under 13 years are the major users of child care during peak times.

Alternatives to child care services for 64 percent of farm families are either to take children along or to leave them on their own while parents work on the farm. The more hours the wife works on the farm, the more frequently children are either taken along or left on their own. Most of the respondents who indicated child care services were not available or accessible (84 percent) either take children with them or leave them on their own while working on the farm.

In general, the greatest concerns for children's safety on farms relate to augers, power take-off equipment, farm chemicals and to children playing around large machinery. However, safety concerns vary with the number of hours parents, especially the wife, work on the farm and with the ages of the children (e.g., for families with school-age children, the farm road entrance to the main road is a major concern). The presence of non-parental adults in the home reduces the level of concern for children's safety.

The youngest age at which parents judge it safe for an average child to participate in farm activities varies most for children riding as a passenger on a cabless tractor or on a snowmobile and playing alone in the farm yard. Older respondents, those with higher levels of education and those interested in the Rural Child Care Safety Registry generally consider a child should be older to safely participate in farm activities.

The type of child care support preferred by farm families is either a caregiver in the farm home who cares for the children and prepares the meals or hired help to free the wife to care for the children. Recommendations for a suitable model of rural child care services are presented.

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INTRODUCTION

The safety of children on farms always has been a concern of farmers. However, with increasing mechanization of farming operations and use of chemicals, especially over the last several decades, the nature of hazardous situations on farms have changed. These changing conditions, coupled with the reduced net income of farmers over the past 10 to 15 years, have placed great pressures on farmers to cut their operating costs to a minimum. To remain viable, farming operations cannot be cut back, so many farmers reduce expenditures by minimizing labour costs. If this is done, it is necessary for the farmer and his wife to compensate by increasing their hours of work on the farm. In other farm families, parents opt to supplement their farm income with full- or part-time off-farm employment of one or both parents (Federated Women's Institutes of Canada, 1992; Bessant, Rounds and Monu, 1994). In such instances, farm work is done outside of employment hours in the early morning or late evening hours and on weekends. These changes in farming conditions severely restrict the parents' opportunities to care for their children and also contribute to making the farm environment unsafe for children.

In recent years there has been increasing public awareness of the need to find ways to support the care of farm children while parents work on the farm. Over the 10-year period from 1983 to 1992 a total of 305 Manitoba children incurred injuries on the farm that required medical attention. These numbers clearly indicate a need for concern for the safety of farm children (Manitoba Health Service Commission, 1993).

Injuries and fatalities among farm children in Manitoba are similar to those reported from other farming communities. From 1985 to 1988 in Wisconsin, a state where dairy farming predominates, 20 percent of farm fatalities involved children under 15 years of age and more than one-half of the deaths were of children less than 5 years of age (Schieldt, 1990). With the large number of dairy and mixed farms in Manitoba, it may well be asked whether our farm children are equally exposed to situations that could cause injury or death.

Machinery accidents account for the largest percentage of fatalities among farm children under 17 years of age. From 1974 through 1985, the Mayo Clinic in Rochester, Minnesota reported 42 percent of fatal accidents involved grain augers, 25 percent with tractors and 11 percent with power take-off equipment. From 1983 to 1992 in Manitoba, 34 percent of injuries to farm children requiring medical attention were accidents with machinery and 19 percent involved animals.

In Manitoba, as in Minnesota, the incidence of injuries to farm children increases around the age of 5 years and again around ages 12 to 14 years. Why the incidence of injuries to farm children peak at these ages is not known. It may be that parents misjudge the physical capabilities of their children to handle the equipment. However, it also could be that parents overestimate the level of cognitive development of their children expecting that they understand the complexities of the task when they are not yet cognitively ready.

Injuries to farm children and fatal accidents occur more frequently during the summer than the winter months. In Alberta from 1976 to 1988 (Alberta Agriculture, 1989), the highest rate of injuries to farm children occurred during May and August, followed by September and July. The highest number of fatal accidents involving farm children was during the month of July.

Off-farm employment of parents has been examined as a factor that may contribute to children more frequently being involved in unsafe situations. Hawk, Donham and Gay (1994) report that on Iowa farms where the mother is employed off the farm, children more frequently accompany an adult operating machinery. However, among families whose preschool children accompanied a parent doing farm work, only 29 percent of the mothers worked off-farm full-time, 31 percent of the mothers worked part-time off-farm, and 40 percent of mothers did not hold off-farm employment.

The safety of children on farms and the provision of appropriate forms of child care to reduce injuries and fatalities among farm children have been primary concerns of the Manitoba Women's Institute. In 1992, the Manitoba Government provided the Manitoba Women's Institute with funding for a pilot project to establish child care registries that could be accessed by farmers (Appendix A). The purpose of the registries is to match community caregivers

with farm families who need care for their children during peak periods of farm operations. The intention is that the child care registries be easily accessible to farm families and that through them, flexible child care arrangements could be made by farm families in need of child care, particularly during peak periods in farming operations. The farm family seeking child care support through the Registry would be responsible to establish the qualifications of the registered caregiver and to negotiate the remuneration. By June, 1993, Rural Child Care Safety Registries had been established in seven municipalities in the Province.

The purpose of this survey is, in part, to assess the Rural Child Care Safety Registry pilot project and, more broadly, to survey the child care needs, preferences and safety concerns of parents of farm children in Manitoba. To understand the specific child care needs in the context of the farming operation, the on- and off-farm work of parents are included in this survey.

SURVEY QUESTIONNAIRE AND SAMPLE

The questionnaire for this survey was designed to obtain information about the farming operation and activities relating to child care and child safety during 1993 (Appendix B). In the questionnaire, information was requested in four general areas:

1. the type and size of the farming operation;
2. the on- and off-farm work hours of the parents;
3. the types of child care used by parents regularly and during peak times, the parents' satisfaction with the child care arrangements they used and their preferred type of child care, and
4. the concerns parents have for the safety of their children on farms, the ages at which they consider it safe for children to participate in various farm activities and the types of safety education programs they would wish to have in their community.

Respondents were requested to return the questionnaire anonymously. Demographic information requested included the sex of the respondent and the age and education level of the respondent and spouse.

Sampling Procedure

The population of interest in this survey is the parents of farm families who have children of an age when child care may be needed and when there is concern for children's safety on farms. According to the 1991 Census, the rural farm population of Manitoba included 20,100 census families. Of these families, 7,350 or 36.6 percent were families with children under 13 years of age.

The sampling objective was to obtain responses from a representative sample of families who were actively farming and living on a farm in Manitoba in 1993, and who had children under 16 years of age. A further objective was to insure that the sample is representative of the various types of farming operations and farming regions in Manitoba. To obtain a representative sample of farm families meeting these criteria, the selection process included the following sequence:

1. From the 1991 Census of Agriculture for the Province of Manitoba, municipalities with the highest percentage of families with children under 13 years of age were identified.

2. From the 1991 Census of Agriculture (Manitoba Agriculture Review), regions of the Province in which various types of farming operations predominate were identified.

3. On the basis of the information from these two sources, 20 municipalities were selected. Five municipalities in which the Rural Child Care Safety Registry had been established were added for a total of 25 municipalities (Selected municipalities are listed in Appendix C).

4. From the Manitoba Rural Municipality Assessment Rolls of the 25 selected municipalities, names and addresses of those whose roll entry was classified as residential farm property were selected randomly.

On March 2, 1994 questionnaires with pre-addressed, stamped return envelopes were sent to the 972 addresses selected as described above. One week later, reminder postcards were sent to all addresses except to the 13 which had been returned by the post office because the person was deceased or had moved. Of the 146 questionnaires returned, 19 were not eligible either because they did not have children under 16 years of age or they were owners who were not actively farming. The six respondents who classified their farming type as hobby farmers were dropped from the final sample because farming was not considered their primary occupation. Therefore, the data presented in this report are based on the responses of 121 farm families with at least one child under 16 years of age. Considering that in the 1991 Census only 36.6 percent of Manitoba farm families had children under 13 years of age, the sample of 121 farm families represents a response rate of 34.5 percent.

The questionnaire was addressed to the Manitoba Farmer. Therefore, the respondents could have been either the husband or the wife which was identified through a gender item at the end of the questionnaire. Sixty-nine percent of the respondents are male and 31 percent are female. However, in a number instances it was apparent that both husband and wife had co-operated in completing the questionnaire.

Characteristics of the 121 Farm Families

Ninety-nine percent of the respondents are married. This exceeds the national proportion of 82 percent married farm operators (1991 Agriculture Census). The majority of the respondents (52 percent) are between 35 and 44 years of age, 32 percent are under 35 years and 16 percent are over 44 years. Husbands generally are older than wives with 57 percent of husbands between 35 and 44 years and 28 percent between 45 and 54 years, whereas 49 percent of wives are between 25 and 34 years of age and 41 percent are between 35 and 44 years.

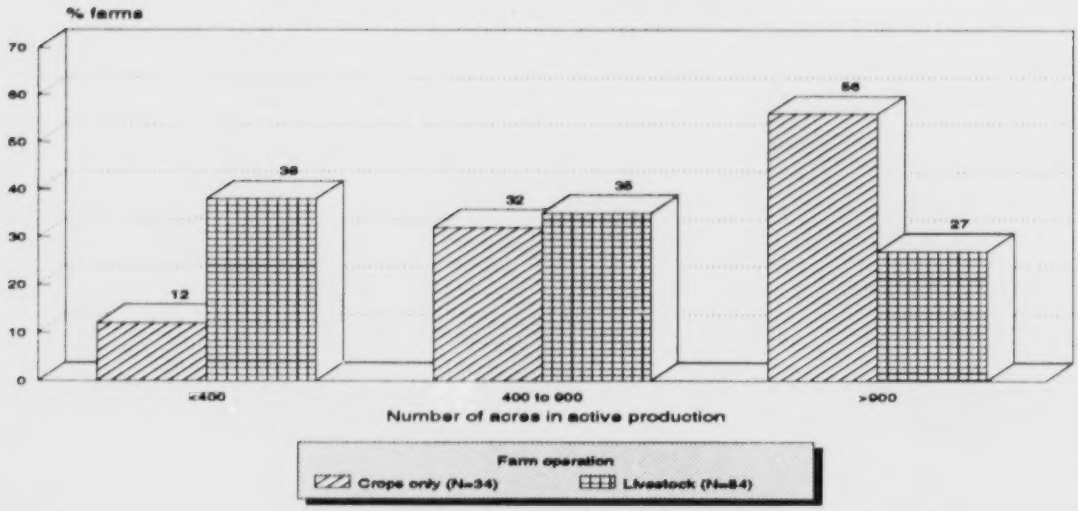
The education level is generally higher among the wives: 61 percent have some post secondary education whereas 42 percent of husbands have some post secondary education. The education level of farmers in this survey exceeds the national average for farm men and women reported in the 1991 Agriculture Census in which 33 percent of primary female farmers and 27 percent of primary male farmers had post secondary education.

As is characteristic of farming in Manitoba, the type of farming operations represented in this survey vary considerably. Because the purpose of this survey is to examine the child care needs and safety of children of farm families, the type of farming operation is of interest in two respects. First, the times of the year when child care is needed may vary with the type of farm operation; second, the potential hazards for children are different depending on whether or not livestock are present on the farm. Therefore, two categories of farm operations have been defined as (a) farms with basically seasonal operations such as grains, oilseeds and market gardening, and (b) farms including any type of animals such as cattle, hogs, sheep, horses, poultry and bees. In this survey, 30 percent of the farming operations are of the first type involving crops only and 70 percent of the second type involving animals of any kind. According to the 1991 Agriculture Census, 58 percent of farms in Manitoba were classified as grain, field crops and fruits and vegetables and 42 percent as involving livestock. Hence, in this survey sample, farms of the first type involving crops only are under represented and farms of the second type with livestock are over represented.

The size of farms is frequently referred to in terms of the number of acres of land. In 1993, 33 percent of the respondents had less than 400 acres in active production, including rented land, 32 percent had 400 to 900 acres and 35 percent had more than 900 acres in active production. The number of acres of land in active production in 1993 varies with the type of farming operation (Figure 1). Of the respondents who had more than 900 acres in active production in 1993, 56 percent raised crops only; of those who also had livestock, 38 percent had less than 400 acres in active production in 1993, 35 percent had 400 to 900 acres and 27 percent had more than 900 acres in active production. However, the number of acres of land does not accurately reflect the nature and extent of work required for all types of farm operations.

Figure 1

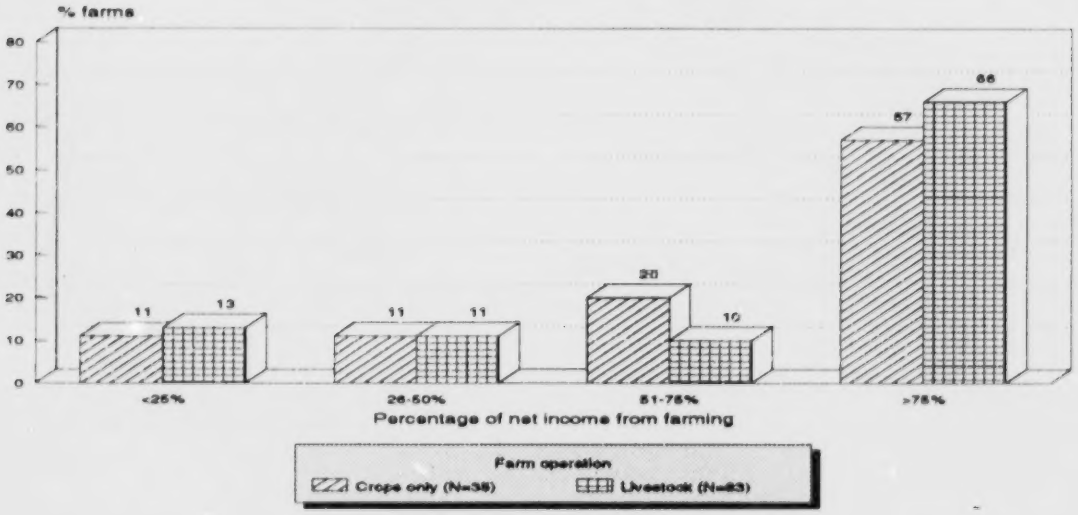
Type of Farm Operation and Number of Acres in Active Production, 1993



The majority of the respondents (64 percent) derived more than 75 percent of their family's net income from farming, 13 percent from 51 percent to 75 percent, 11 percent from 26 percent to 50 percent and 13 percent derived 25 percent or less of their family's net income from farming (Figure 2). Of the families who derived more than 75 percent of their net family income from farming, 42 percent had more than 900 acres in active production in 1993, 39 percent had 400 to 900 acres in active production and 19 percent had less than 400 acres in active production in 1993.

Figure 2

Type of Farm Operation and Percentage of Net Income from Farming in 1993



Average distances of the farm home from essential services and supplies are listed in Table 1. On average, farmers travel 12 miles to purchase groceries, 11 miles to the nearest hospital and 10 miles to the nearest doctor and the nearest ambulance. Services closer to the farm home are fire (8 miles), schools (9 miles) and farm supplies (9 miles). Across all these services, farmers travel an average of 10 miles, with two-thirds of the farmers travelling between 3 and 17 miles.

Table 1. Number of miles farmers travel for essential services (N=121)

Service	Average number of miles	Standard deviation	Range of miles
Groceries	12.2	12.90	0.5 to 96
Hospital	11.3	7.76	1 to 40
Doctor	10.4	6.98	0.5 to 40
Ambulance	10.4	7.03	2 to 40
Farm supplies	9.2	7.43	0.5 to 45
School	8.8	11.01	0.5 to 98[a]
Fire	7.8	5.50	0.5 to 40

[a] Some children with special needs attend school outside their community.

FARM WORK AND OFF-FARM EMPLOYMENT

The needs of farm families for child care are closely tied to the number of hours parents work on and off the farm. Furthermore, the pattern of work hours of parents varies with the season of the year and with the type of farm operation. Hence, the need for child care supports vary accordingly. Because on-farm work is seasonal, particularly with crop farming, farmers are able to take on casual or part-time work during the off-season. The economic conditions in agriculture today increase the likelihood of farmers seeking off-farm work.

On-farm Work

The majority of the parents in this survey are full-time farmers. In 1993, 61 percent of the husbands and 55 percent of the wives did not work off the farm either in a regular job or on a part-time basis.[1] During the summer months of 1993, 65 percent of husbands who are full-time farmers worked on the farm more than 60 hours a week (Figure 3) with an average of 70 hours a week (SD = 22.22). During the winter months, 44 percent worked on the farm between 17 and 40 hours a week with an average of 40 hours a week (SD = 19.92). However, the number of hours of on-farm work during the winter months is significantly higher among husbands involved in livestock operations (M = 41 hours, SD = 20.83) than among those in crop operations only (M = 27 hours, SD = 12.80; $t = 2.98$, $p<0.004$). During the summer months, husbands involved in crop operations only worked about the same number of hours on the farm (M = 71 hours, SD = 17.32) as those involved in livestock operations (M = 66 hours, SD = 23.77; $t = .93$, p = NS).

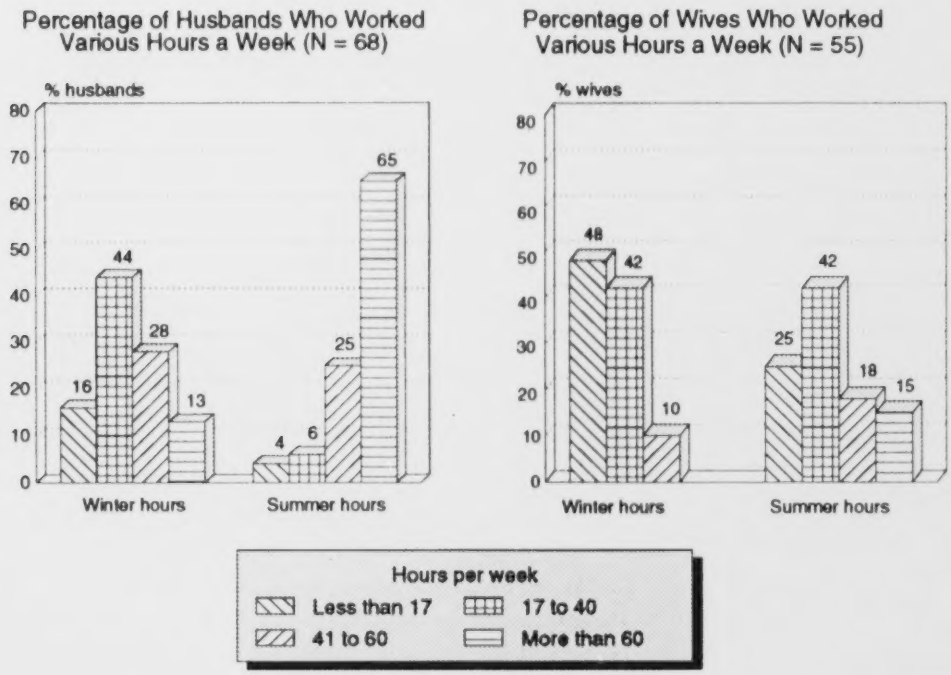
Wives generally worked fewer hours on the farm than their husbands. Similar to their husbands, wives worked on the farm more hours during the summer (M = 35 hours, SD = 24.16) than during the winter months (M = 19 hours, SD = 16.72). The largest proportion (42 percent) of wives worked between 17 and 40 hours a week on the farm during the summer months but 18 percent worked between 41 and 60 hours and 15 percent worked more than 60 hours a week on the farm during the summer (Figure 3). The on-farm work of wives reduces considerably during the winter months: 48 percent worked less than 17 hours a week and none worked more than 60 hours a week on the

1 The 1991 Census of Agriculture reports that, on farms with two operators, 62 percent of operators did not work off the farm in 1990.

farm. There is no difference between wives involved with crop and livestock operations in the number of hours worked per week on the farm either during the summer or the winter months.

Figure 3

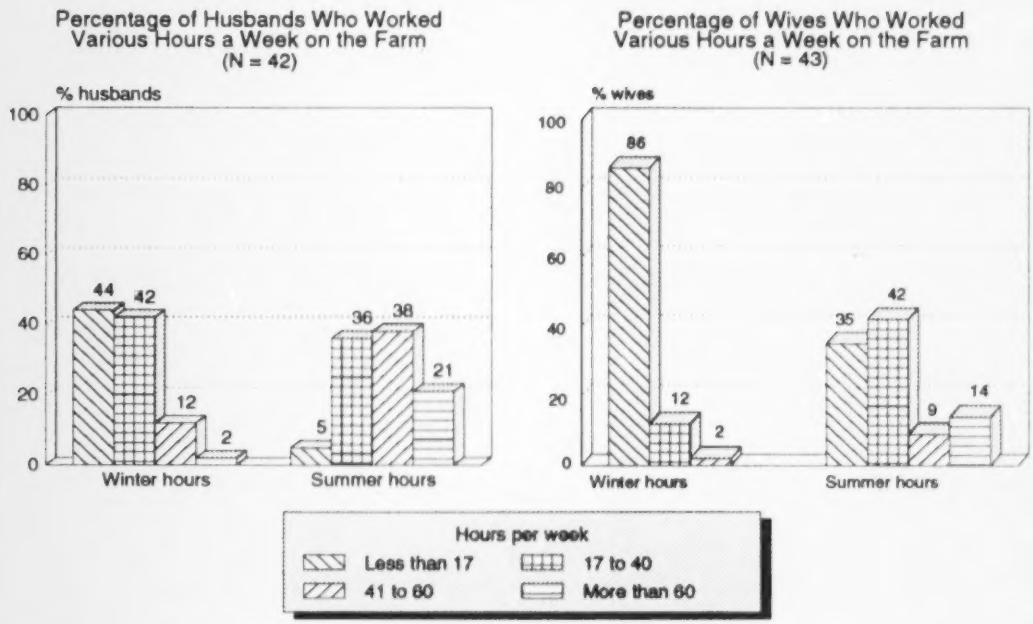
On-farm Work of Full-time Farmers



Husbands who also work off the farm, worked fewer hours on the farm than husbands who are full-time farmers during both the winter months, X^2 (3, N = 110) = 13.61, p<.003, and during the summer months, X^2 (3, N=110) = 24.96, p<.001. During the winter months, 86 percent of husbands who also work off the farm, worked on the farm 40 hours or less a week (Figure 4) in contrast to 60 percent of husbands who are full-time farmers. During the summer months, only 21 percent of husbands who also work off the farm, worked on the farm more than 60 hours a week whereas 65 percent of husbands who are full-time farmers worked more than 60 hours a week on the farm. Among the wives, the number of hours worked on the farm during the summer months by those who also work off the farm and those who are full-time farmers did not differ significantly. However, during the winter months, 86 percent of wives who also work off the farm worked on the farm less than 17 hours a week whereas more than one-half (52 percent) of the wives who are full-time farmers worked 17 hours or more a week on the farm, X^2 (2, N = 95) = 14.98, p<.001).

Figure 4

On-farm Work of Farmers Who Also Worked Off the Farm



Off-farm Employment

In 1993, 19 percent of the husbands were employed off the farm on a regular basis. Almost one-half were employed more than 40 hours a week and another 26 percent, between 33 to 40 hours a week (Figure 5). These husbands drove an average of 18 miles (SD = 20.24) to their place of employment. As expected, the more hours the husband was employed regularly off the farm, the smaller the percentage of net income obtained from farming ($r = 0.77$, $p<0.001$).

Thirty-five percent of the wives also were employed regularly off the farm in 1993. However, the wives generally were employed for fewer hours a week than were their husbands (Figure 5). Forty-one percent of the wives employed regularly worked between 17 and 32 hours a week and 29 percent between 33 to 40 hours a week.[2] On average, wives drove 15 miles (SD = 27.69) to their place of employment. The percentage of net income derived from farming was not related to the wife's regular employment off the farm.

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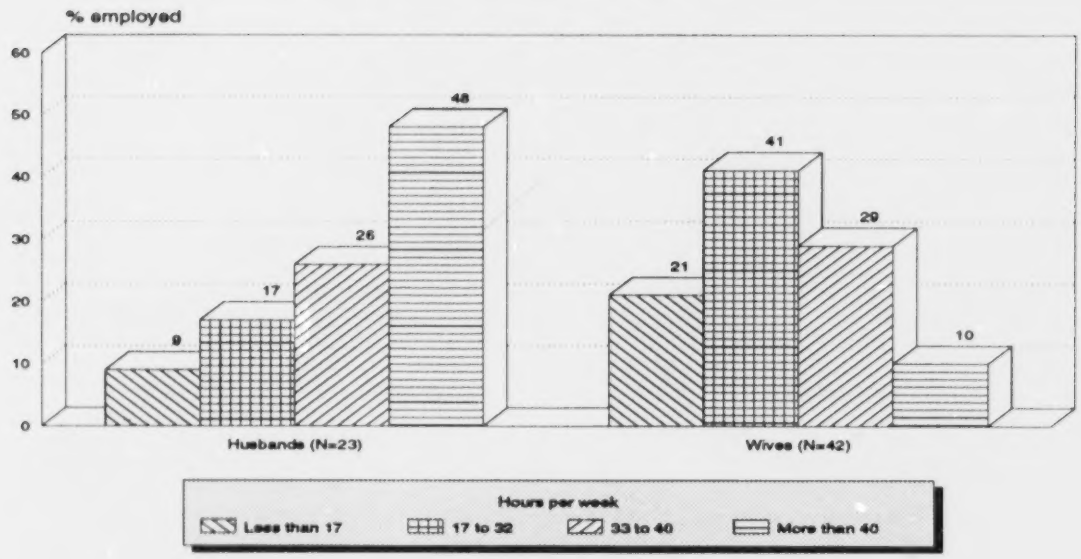
2 In the 1988 Canadian National Child Care Survey, 56 percent of Canadian farm parents who were primarily responsible for child care were regularly employed or studied full-time (30 or more hours a week), 27 percent were employed or studied part-time (less than 30 hours a week) and 18 percent were neither employed nor studying. In this survey, 95 percent of the parents with primary child care responsibilities were mothers (Brockman, 1992).

Figure 5

Percentage of Husbands and Wives Employed Regularly Off the Farm: Hours a Week Employed



In 1993, 21 percent of the husbands and 12 percent of the wives worked off the farm, but not in regular employment. Generally, both husbands and wives who worked off the farm on a casual basis did so during the winter months (Figure 6). As expected, proportionately more husbands involved in crop operations (28 percent) worked off the farm in casual jobs than among husbands involved in livestock operations (16 percent). Among the wives, however, proportionately more involved in livestock operations (12 percent) than those with crop operations (6 percent) worked off the farm in casual jobs.

Hired Help

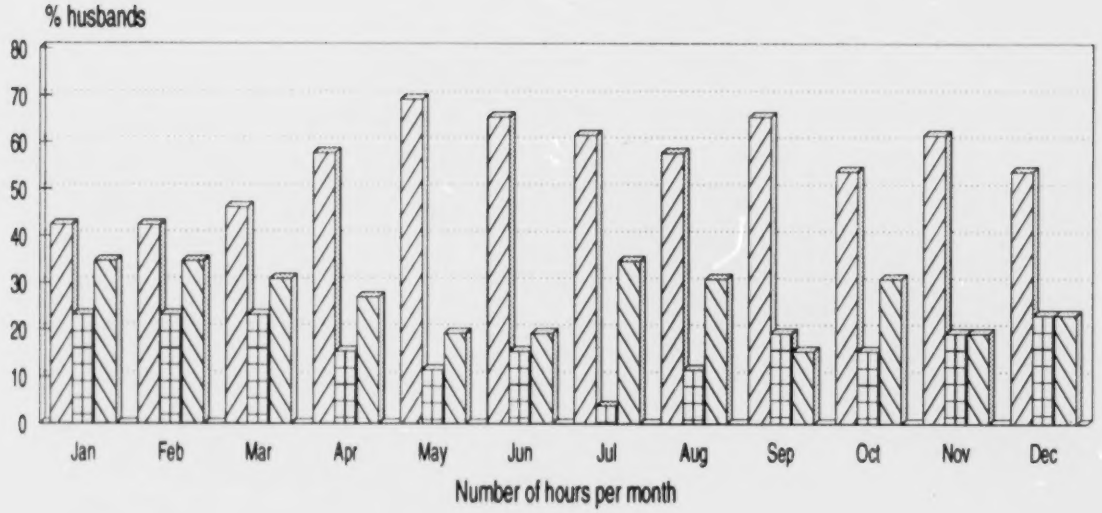
More than one-half of the respondents had hired help during 1993. The majority (88 percent) of this hired help was seasonal. The summer months, including peak seasons such as seeding, haying, tending market gardens and harvesting, are the principal times of the year when seasonal help was hired (Figure 7). Sixty-nine percent of operators of crop farms hired seasonal help, whereas only 49 percent of those with livestock operations hired seasonal help (1df, $N = 121$, $X^2 = 4.11$, $p<0.05$). Farmers who hired seasonal help had more than 400 acres in active production in 1993 ($t = 2.12$, $p<0.04$) and they obtained more than 50 percent of their net income from farming ($t = 2.68$, $p<.01$).

In summary, the majority of parents of farm families with children under 16 years are full-time farmers with husbands working on the farm an average of 70 hours a week during summer months and 40 hours a week during winter months and wives, 35 hours a week during summer months and 19 hours a week during winter months. Husbands employed off the farm generally hold full-time jobs whereas wives employed off the farm are in part-time jobs. Parents who are employed off the farm work proportionately fewer hours on the farm. Farmers who hire seasonal help farm more than 400 acres and obtain more than 50% of their net income from farming.

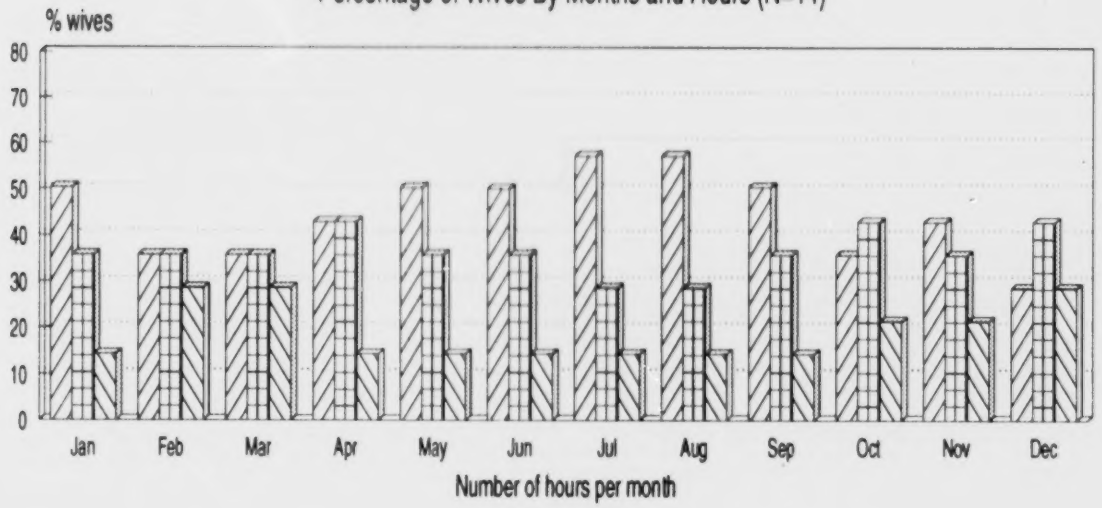
Figure 6

Off-farm Employment on a Nonregular Basis

Percentage of Husbands By Months and Hours (N=26)



Percentage of Wives By Months and Hours (N=14)



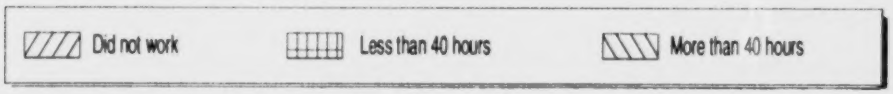
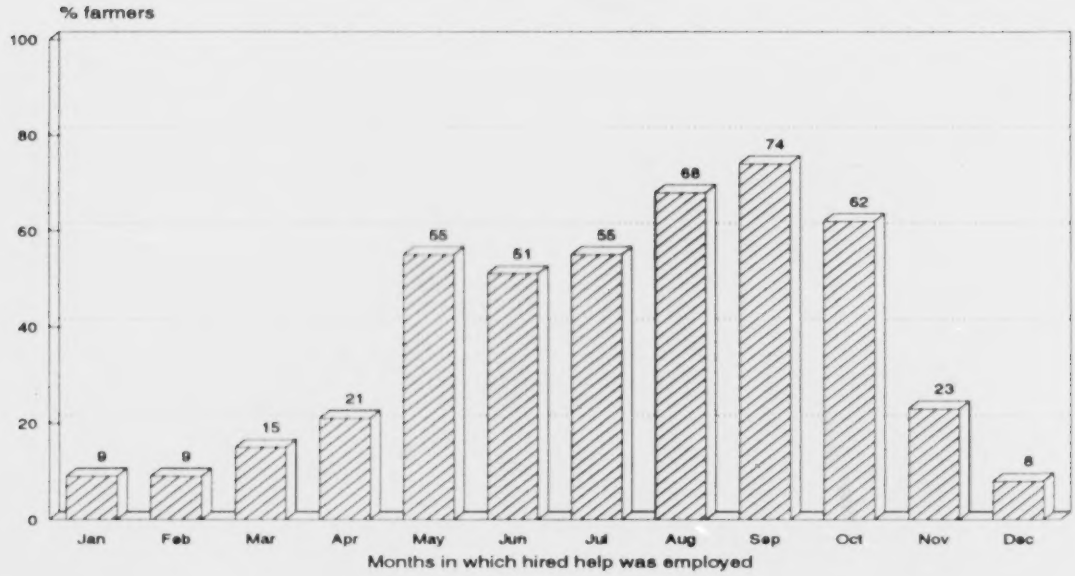


Figure 7

Of the Farmers Who Employed Hired Help,
the Percentage Who Hired Help Each Month
in 1993 (N=53)



FARM FAMILIES AND CHILD CARE

The care of young children and the needs for child care services among farm families are unique in several respects. Factors associated with and defining the unique needs of these families include the location of the family home, the nature of the farming operation and the seasonality of farm work. The implications of the location of the family home for child care are twofold. First, because the family home is located on the farm, accessibility to services, including licensed child care, is generally reduced in proportion to the distance of the farm from a population centre. Secondly, because the family home is located on the farm, the child's home is, in reality, in the midst of the workplace. Hence, as is the case in most workplaces, safety is a concern.

The nature of farming operations today heightens the concerns for the safety of farm children. The mechanization of farming with ever larger and more automated machinery and the use of more chemical controls increases the type and number of hazardous situations present on farms. The seasonality of many of the farming activities, compounded by the intensity and long hours of work required at these peak periods, results in very irregular, and often unpredictable times when farm families need child care. In this section, after describing the composition of the farm families in this survey, the type of child care they used on a regular basis and during peak periods are described. The forms of child care preferred by these families also are presented.

Family Composition

In total there are 294 children under 16 years of age in the 121 responding families: 34 percent of preschool age (under 6 years), 42 percent of elementary school age (6 to 12 years) and 24 percent of teen-age (13 to under 16 years).

On average there are 2.4 children under the age of 16 years in these families, which is higher than the average reported for Canadian families (1.2) and for Manitoba families (1.2) in the 1991 Census for Canada.

In 50 percent of the families there are no preschool children, in 25 percent there is one preschool child and in 25 percent there are two or more preschool children (Table 2). There is a smaller proportion of families (37 percent) with no school-age children, but almost one-third with one school-age child (31 percent) and one-third with two or more school-age children (31 percent). Relatively fewer families have teen-age children under age 16 years: 55 percent have no teen-age children, 31 percent have only one and 12 percent have two or more teen-age children.

Table 2. Percentage of families with none, one, and two or more preschool, school-age and teen-age children under 16 years of age

Age group	Number of children in family	Number of families	Percentage of families*
Preschool (under 6 yrs.)	None	61	50
	One	30	25
	2 or more	30	25
	Total	121	100
School-age (6 to under 13 yrs.)	None	45	37
	One	38	31
	2 or more	38	31
	Total	121	100
Teen-age (under 16 yrs.)	None	67	55
	One	39	32
	2 or more	15	12
	Total	121	100

* Percentages may not add due to rounding.

In addition to the parents, 48 percent of the households also included children over 15 years of age and in 4 percent of the households other adults resided with the family. The majority of these residents were young adults. The average number of persons in the households, including parents, children and other adults is 4.7 (S.D. = 1.17).

Types of Child Care Used Regularly by Farm Families

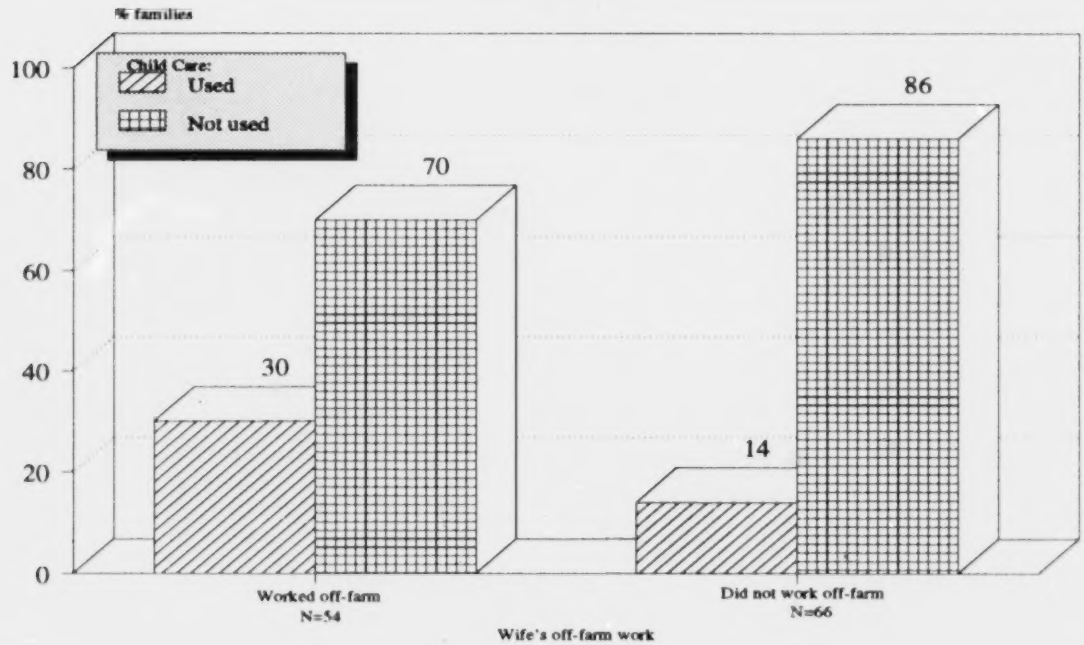
Given that three-fourths of the children in these families are 12 years of age or younger, the question is: What forms of child care were used by their families on a regular basis and during peak periods of the farm operation? On a regular basis only 21 percent or 25 families, used child care provided either in a day care facility, by a relative other than a member of the immediate family (parents, brother or sister), or by a neighbour, friend or babysitter. More than one-half of the children receiving these forms of care were of preschool age. Of the 25 families who regularly used one of these forms of child care, one-fourth used a day care centre, generally for less than 15 hours a week, typically located less than 10 miles from the home and operated either by a parent co-operative or by an individual or group for profit. The remaining three-fourths of the 25 families regularly used care provided by a relative, neighbour, friend or babysitter. Children of almost one-half of these families were in the care of this person for more than 15 hours a week and almost one-third for 4 to 15 hours a week. In 75 percent of cases the children were cared for in the caregiver's home.

The husband's and wife's work on and off the farm are associated with the regular use of child care provided either by a day care centre or by a caregiver other than a member of the immediate family. These forms of child care

were used regularly by proportionately more families in which wives worked off the farm (30 percent) than among families in which the wives did not work off the farm (14 percent) (1df, $N = 120$, $X^2 = 4.61$, $p<0.03$) (Figure 8).

Figure 8

Off-farm Work of the Wife and the
Use of Child Care



The husband's on-farm work during the summer months also is associated with the use of child care provided outside the immediate family (Figure 9). Such child care was used by significantly more families (46 percent) in which the husband worked on the farm for less than an average of 40 hours a week during the summer months than by families (16 percent) in which the husband worked on the farm an average of more than 40 hours a week during the summer months (1df, $N = 110$, $X^2 = 9.33$, $p<0.002$). Families in which both husband and wife worked off the farm used child care outside that of the immediate family but the number was not significant.

Also associated with the regular use of child care provided outside the immediate family is the percentage of net income derived by families from farming (Figure 10). Such child care was used by 37 percent of the families who indicated that 75 percent or less of their net income was derived from farming. On the other hand, of those families deriving more than 75 percent of their net income from farming, only 11 percent used child care outside the immediate family (1df, $N = 118$, $X^2 = 11.88$, $p<0.001$).

Figure 9

Husband's Summer On-farm Work
and the Use of Child Care

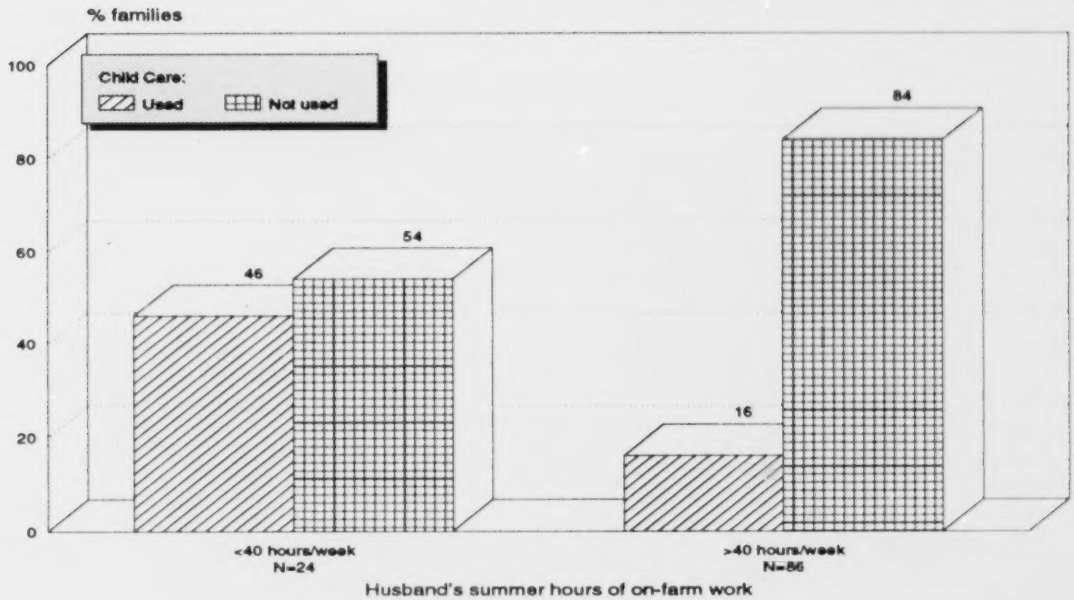
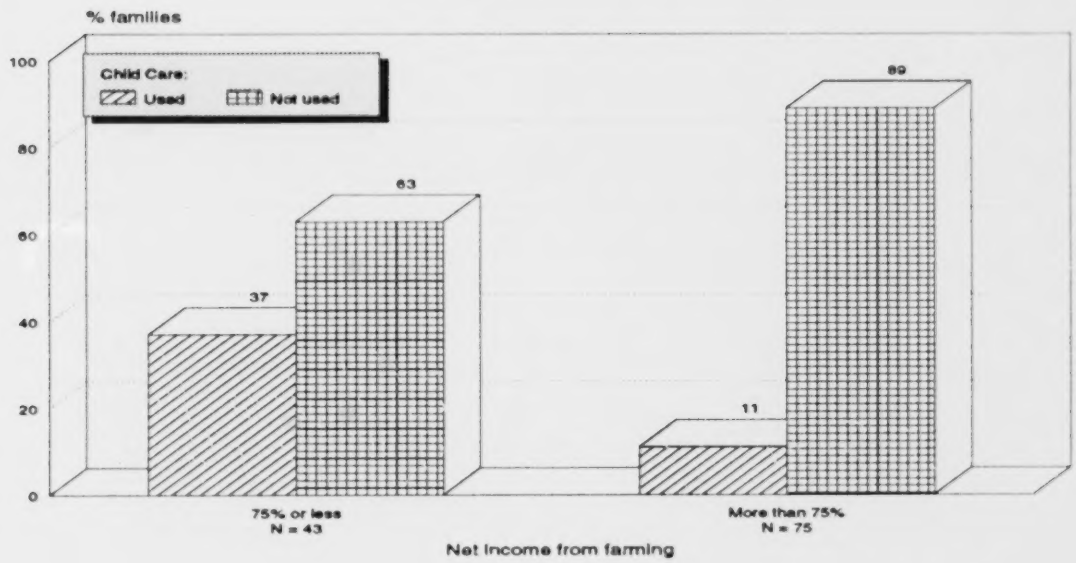


Figure 10

Percentage of Net Income from Farming
and the Use of Child Care

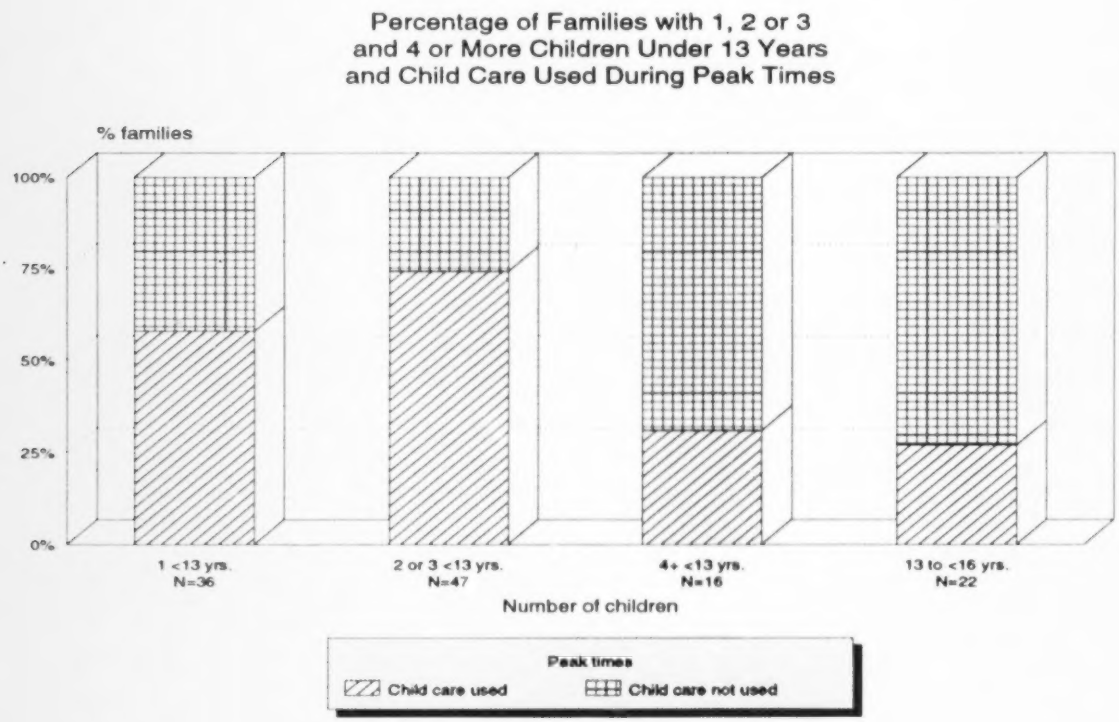


Child Care During Peak Periods in Farm Operations

At times such as seeding, harvesting, calving or haying these farming operations take precedence over other activities. The window of opportunity to complete these operations is restricted and, depending on weather conditions, can be erratic. The need for someone to care for younger children at these times becomes critical, particularly when the weather is less than favourable. To meet the needs of farm families for child care at such times requires great flexibility and adaptability of the day care centre or the caregiver.

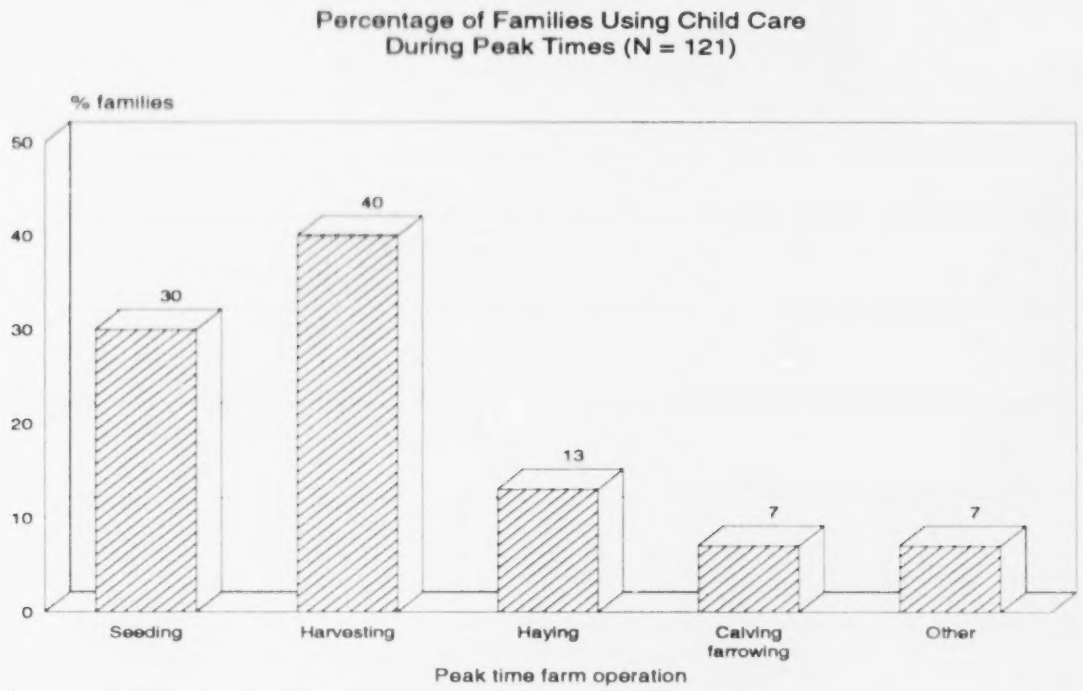
A total of 67 families used some form of child care during one or more of the peak periods in farm operations. The use of child care during peak periods was strongly associated with the number of children in the family under 16 years of age (3df, $N = 121$, $X^2 = 17.86$, $p<0.001$). More families with one child (58 percent) and with two or three children (75 percent) under 13 years of age used child care during peak times than those with four or more children (31 percent) under 13 years (Figure 11). Child care also was used during peak times by 27 percent of the families who had no children under 13 years of age but did have children between 13 and under 16 years.

Figure 11



The largest number of families used child care during those peak times that are common to most types of farming (Figure 12). Forty percent of the 121 families used child care during harvesting and 30 percent during seeding. However, peak times vary with the type of farming. Child care was used by 13 percent of the families during the haying season and by 7 percent during times of calving or farrowing. The 7 percent who used child care at other peak times represent the diversity in farming in Manitoba which includes market gardening, PMU operations, sheep ranching and apiaries where peak times also are experienced.

Figure 12



The duration of peak periods also varies with the type of farming operation; hence, the length of time child care is needed varies. Figure 13 shows, for each peak time, the percentage who used child care for less than 3 days, from 3 to 10 days and for more than 10 days. During seeding time families used child care an average of 10 days (SD = 8.22), during harvesting, an average of 14 days (SD = 11.55) and during haying season, an average of 13 days (SD = 10.28). Although fewer families used child care at the time of calving or farrowing, they did so for more days (M = 21 days, SD = 22.09). Families using child care during other peak times also did so for more days (M = 21 days, SD = 17.12). Almost one-half of the families (49 percent) used child care during two or more peak periods. In total in 1993, these farm families used child care an average of 23 days (SD = 27.29).

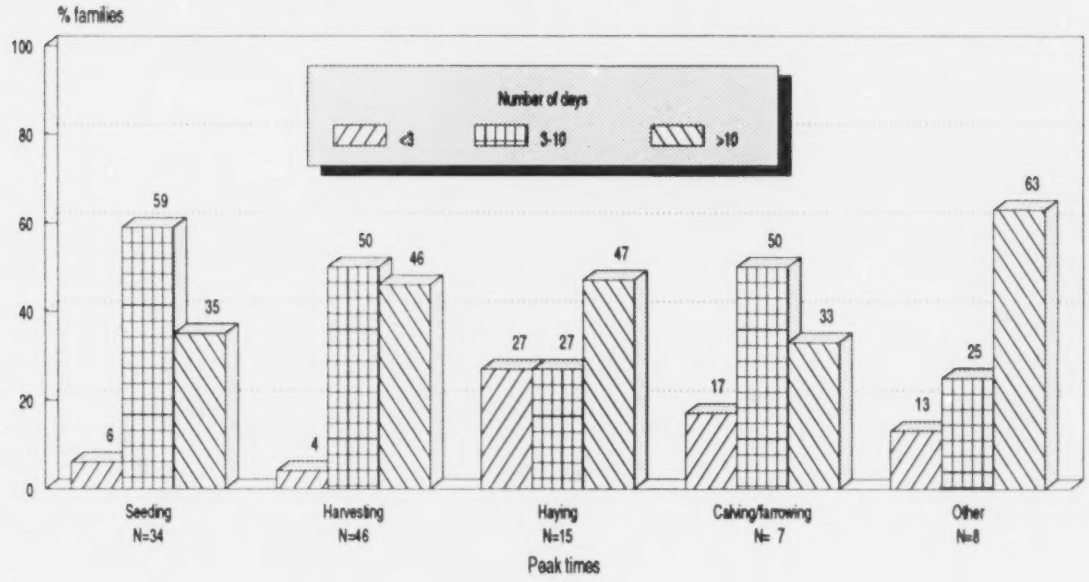
The number of hours a day that child care was used also varies with the type of peak time. Figure 17 shows, for each peak time, the percentage of families who used child care during peak periods for less than 5 hours, from 5 to 8 hours and more than 8 hours a day. During seeding time child care was used an average of 5.4 hours a day (SD = 2.98) and during harvesting, 6.0 hours a day (SD = 4.31). Child care was used for fewer hours a day during the haying season (M = 3.0 hours, SD = 2.94) and during calving or farrowing (M = 3.9 hours, SD = 2.95). During other peak times child care was used an average of 5.3 hours a day (SD = 7.52).

The number of days and hours child care was used during peak periods is associated with farm income and with the wife's on-farm work. The greater the percentage of income derived from farming, the fewer hours child care was used in total over the peak times ($r = -.38$, $p<0.002$) and during harvesting ($r = -0.30$, $p<0.05$). The number of hours the wife worked on the farm during the summer months also is associated with the use of child care during peak times. In total, more days of child care were used by families in which the wife worked more hours on the farm during the summer months ($r = .28$, $p<0.04$) and during the winter months ($r = .29$, $p<0.03$). The wife's summer hours of on-farm work also are positively related to the number of days child care was used during harvesting ($r = .31$, $p<0.05$).

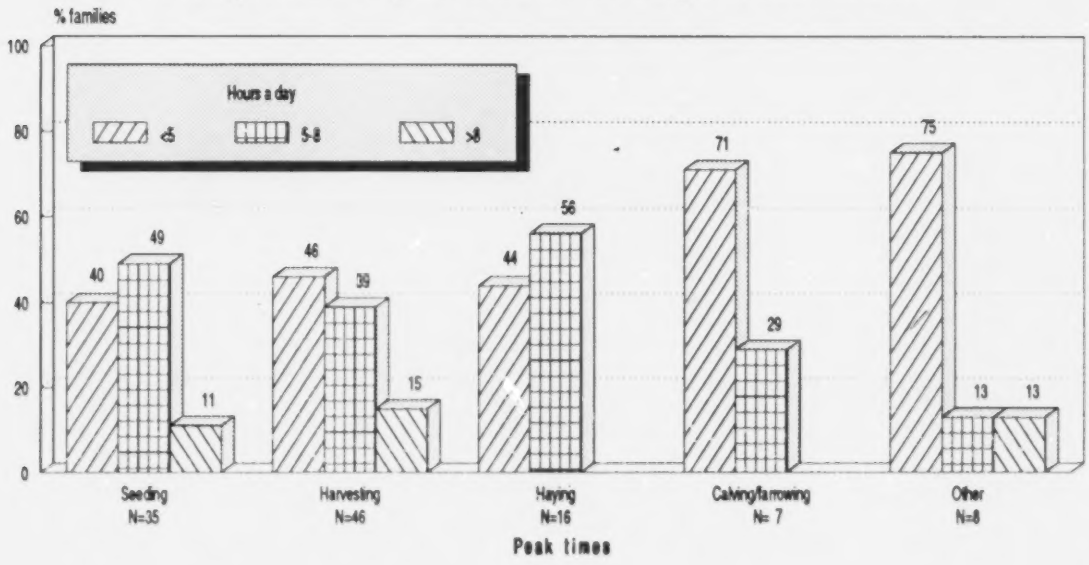
Figure 13

Families Using Child Care During Peak Times in 1993 and the Number of Days and Hours a Day Child Care Was Used

Percentage of Families By the Number of Days Child Care Was Used



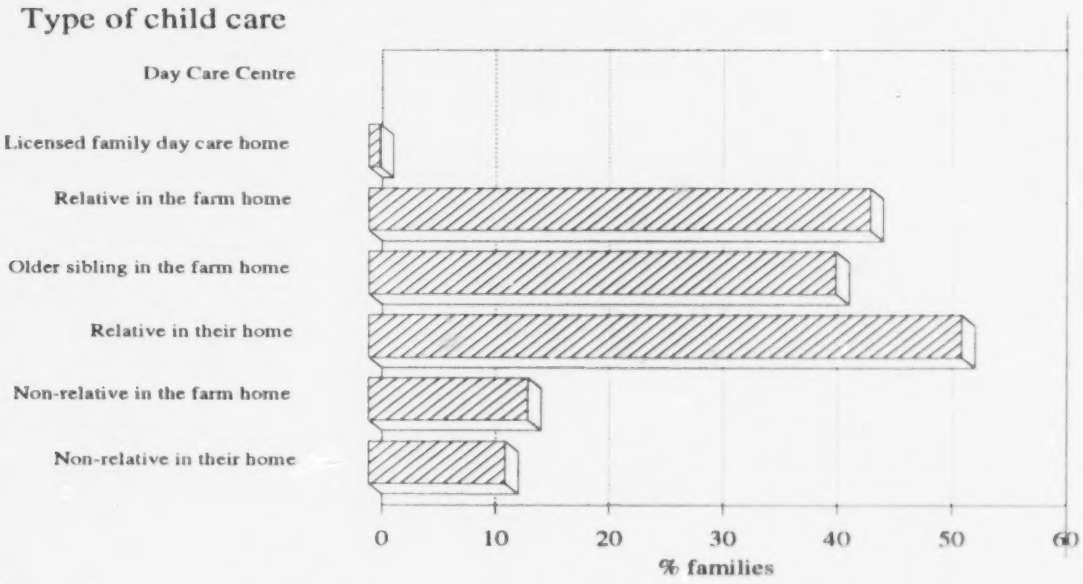
Percentage of Families By the Number of Hours a Day Child Care Was Used



The type of child care used most frequently by these families during peak times is shown in Figure 14. Care by a relative other than a member of the immediate family was used by most of the families. Most frequently the relative cared for the children in his or her own home (52 percent) and almost as frequently in the farm home (44 percent). Non-relatives provided care less frequently, whether in the farm home (14 percent) or in their homes (12 percent). In 41 percent of the families needing child care during peak times, older brothers or sisters helped out. This would be an alternative for the 48 percent of families in the total sample with children over 15 years of age who are living at home.

Figure 14

Percentage of Families and the Types of Child Care Used During Peak Times



N=73

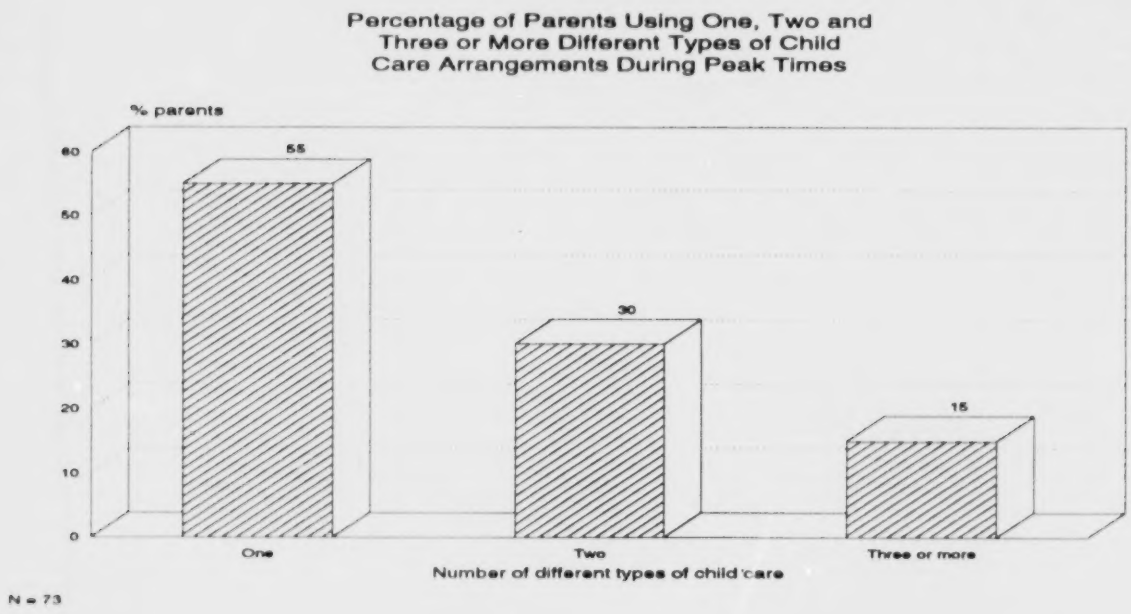
Of the families using child care on a regular basis, 88 percent also used child care during peak times. These families obtained the peak care needed from a non-relative either in the farm home or in the caregiver's home, including family day care.

However, for many families, making arrangements for child care during peak times is a far more complex task, and many used more than one type of child care arrangement during peak times (Figure 15). One type of child care was used by 55 percent of the families who used child care during peak times. However, many families used the resources of several different types of caregivers. Two types of caregivers were used by 30 percent of the families and 15 percent used three or more types of caregivers.

The major users of child care during peak times are families with one to three children under 13 years. During peak times, child care was used equally by farm families involved in crop and livestock operations, by farm families with fewer and more acres of land in active production, by those with and without hired help and by farm families who obtain more or less of their net income from farming.

When respondents were asked how they learned of the availability of the care they used during peak times, 89 percent indicated the caregiver was a relative, friend or neighbour who could be asked to care for their children. Of those who used child care during peak times, 86 percent indicated that their child care arrangements met their needs.

Figure 15



Respondents who had not used regular child care services in 1993 ($\underline{N}$ =96) were asked to check the main reason why they did not. Of the 91 who responded to this question, 12 percent indicated that child care services either were not available or were available at times that were not suitable. Another 15 percent indicated either that it was too far to travel to the child care services or that the services were too costly. The remaining 73 percent responded that child care services were not needed or wanted.

The need for child care services was associated strongly with the percentage of net income the families derived from farming (1df, $\underline{N}$ = 89, X^2 = 7.73, p<0.005). Seventy-five percent of those families (N=59) deriving more than 75 percent of their net income from farming indicated they did not need or want child care services. Of those obtaining 75 percent or less of their net income from farming (N=30), only 25 percent did not need or want child care services.

If child care fee subsidies were available, only 14 percent would consider using child care services. Of those who would not use child care services if fee subsidies were available, 91 percent also indicated they did not need or want child care services. The use of child care services contingent on the availability of child care fee subsidies also is associated with the percentage of income derived from farming (1df, $\underline{N}$ = 105, X^2 = 9.27, p<0.002). Of the respondents who obtain more than 75 percent of their net income from farming, 94 percent would not use child care services if fee subsidies were available and of those deriving 75 percent or less of their net income from farming, 73 percent would not use child care services if fee subsidies were available.

If parents of farm families do not want formal child care services, although they need assistance with child care during peak times, what type of child care would they prefer? Of the 57 who responded to this open-ended question, 44 percent would prefer having a caregiver come to their home when child care was needed (such as during peak times), and 11 percent would prefer having their children cared for in the caregiver's home or in a day care centre. However, a large proportion of the families (46 percent) prefer care provided by the immediate family or relatives.

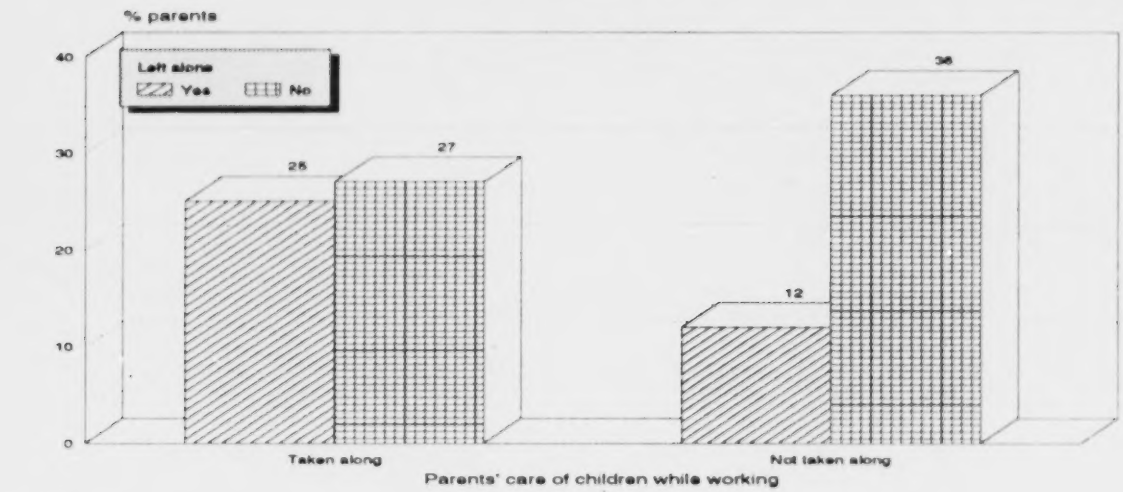
In their write-in general comments and suggestions, however, many respondents clearly indicated they were not opposed to subsidies, but rather, they were opposed to subsidized child care fees. Twelve percent of the respondents suggested that subsidies be available either (a) to hire a caregiver to come to their home during peak times to both care for the children and to prepare meals (thus freeing the wife to assist with the farm operations), or (b) to hire additional help for the farm operations thus allowing the wife to care for the children and household tasks herself.

Care of Children While Working on the Farm

When other forms of child care are not available to farm families, or child care cannot be afforded, parents must rely on the best options available to them. Depending on the circumstances and the type of farm operation, some parents elect to take their children along while they work on the farm as the safest alternative; other parents judge that it is safer to leave the children on their own while they work on the farm. While working with farm machinery or tending to farm chores, 64 percent of parents in this survey either took their children under 13 years of age with them and/or they left the children on their own (Figure 16). Twenty-five percent of the parents both took their children along and left them on their own while they worked on the farm, 27 percent only took their children along and did not leave them on their own, and 12 percent left their children on their own and did not take them along while working on the farm. Just over one-third of the parents (36 percent) neither took their children along nor left them on their own while working on the farm (1df, $\underline{N} = 113$, $X^2 = 6.67$, $p<0.01$).

Figure 16

Percentage of Parents Taking Children Along and Leaving Children Alone While Working on the Farm



N = 113

Parents who took their children along while working on the farm did so an average of 16 times a month (SD = 17.04). Parents who did not take their children under 13 years along but left them on their own while working on the farm did so an average of 7 times a month (SD = 8.67). Parents who both took their children under 13 years along and left them on their own while working on the farm, also left their children on their own an average of 7 times a month. From a child safety perspective, among the 25 percent of families in which parents sometimes find it necessary to take their children with them while working on the farm and, at other times to leave them on their own, there is a possible need for child care support 23 times a month.

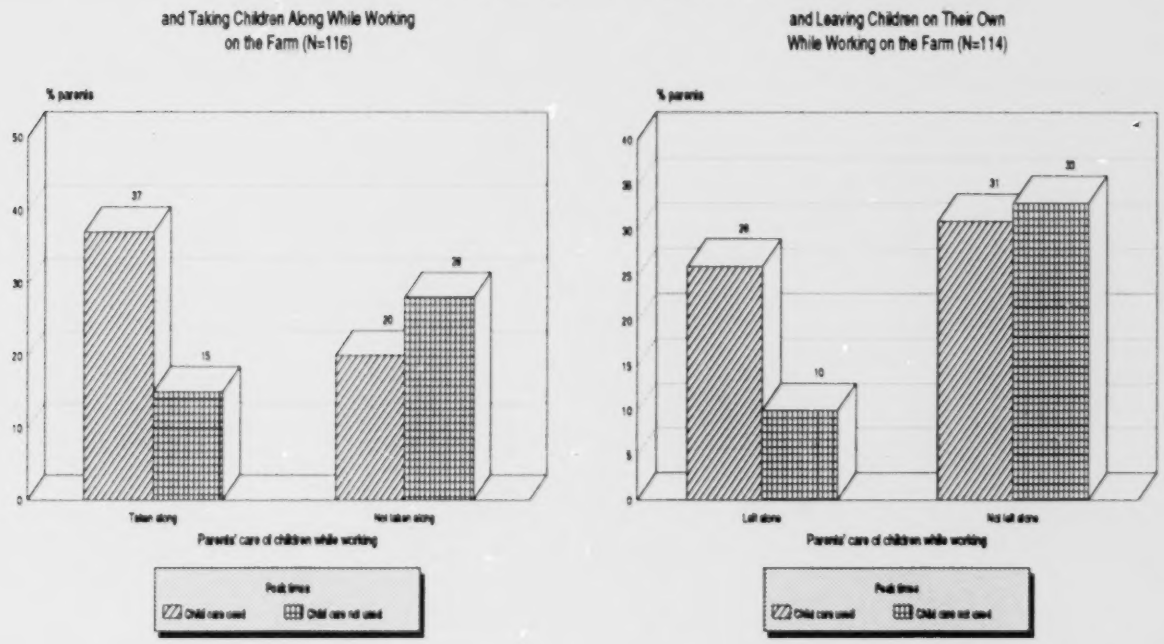
More husbands (47 percent) took their children along while working on the farm than did wives (40 percent). However, wives took their children with them more frequently ($\underline{M}$ = 13 times a month, $\underline{SD}$ = 9.79) than the husbands ($\underline{M}$ = 10 times a month, $\underline{SD}$ = 8.59). The number of times parents took children along while working on the farm is associated with the number of hours the wife worked on the farm during the summer months (r =0.44, p<0.001). The number of times children were left on their own also is associated with the wife's on-farm work during the summer months (r = 0.39, p<0.03). That is, the more hours the wife worked on the farm during the summer months, the more frequently children under 13 years were left on their own and the more frequently they were taken along while parents worked on the farm. It may be noted that the data from Alberta Agriculture shows that the highest incidence of farm accidents involving children occurs in May and August, and fatal accidents in July.

The reason that had been given for not using regular child care services was strongly associated with whether or not the parents took their under 13-year-old children with them while working on the farm. Eighty-four percent of those who said child care services were not available or not accessible took their children along while working on the farm. On the other hand, of those who responded that child care services were either not needed or not wanted, 36 percent also took their children along while working on the farm (1df, $\underline{N}$ = 87, X^2 = 16.78, p<0.001). Furthermore, parents who indicated that child care services were unavailable or inaccessible took their children along an average of 17 times a month whereas parents who indicated that child care services were either not needed or wanted took their children along an average of 3 times a month (t = 5.26, p<0.001).

The use of child care during peak times also was associated with the frequency of taking children along or leaving them on their own while parents worked on the farm (Figure 17). Thirty-seven percent of parents used child care during peak times and also took their children with them while working on the farm. However, 20 percent of the parents used child care during peak times but did not take their children along while working on the farm and 29 percent neither used child care during peak times nor did they take their children along while they worked on the farm (1df, $\underline{N}$ = 116, X^2 = 11.06, p<0.001).

Figure 17

Percentage of Parents Using Child Care During Peak Times



Similarly, the use of child care during peak times was associated with leaving children on their own while parents worked on the farm (Figure 17). Twenty-six percent of parents who used child care during peak times also left their children on their own while working on the farm, and 10 percent left children on their own and did not use child care during peak times. However, 31 percent of parents used child care during peak times and did not leave their children on their own while working on the farm, and 33 percent neither left their children on their own nor used child care during peak times (1df, $N = 114$, $X^2 = 6.82$, $p<0.009$).

In this survey, farm families with children under 13 years use four types of child care alternatives.

1. Regular child care, generally available through arrangements with relatives, friends or neighbours, is used more frequently among families in which either the husband is employed full-time off the farm or the wife is employed part-time off the farm.

2. Child care during peak times is used primarily by farm families with one to three children under 13 years regardless of the type of farm operation, size of the farm, the percentage of net income derived from farming or the employment of seasonal hired help.

3. Parents taking children under 13 years along while working on the farm is an alternative used by 37% of farm families who already use care by relatives, friends or neighbours during peak times. For many of these parents, child care is not available or accessible.

4. Parents leaving children under 13 years on their own while they work on the farm is an alternative for 36% of the parents who also use care by a relative, friend or neighbour during peak times.

Based on the data from this survey, it is estimated that at least 25% of farm families with children under 13 years in which neither the husband or the wife is regularly employed off the farm are in need of child care services and support at times other than peak periods in the farming operation.

FARM CHILDREN AND SAFETY

Many of the surveys of child safety on farms ask what farm children do and then researchers infer whether the activity is or is not safe for children. Assuming parents know the nature of the situations on their own farms, in this survey they were asked (a) what their safety concerns are and (b) at what age they think it is safe for an average child to participate in a number of selected farm activities.

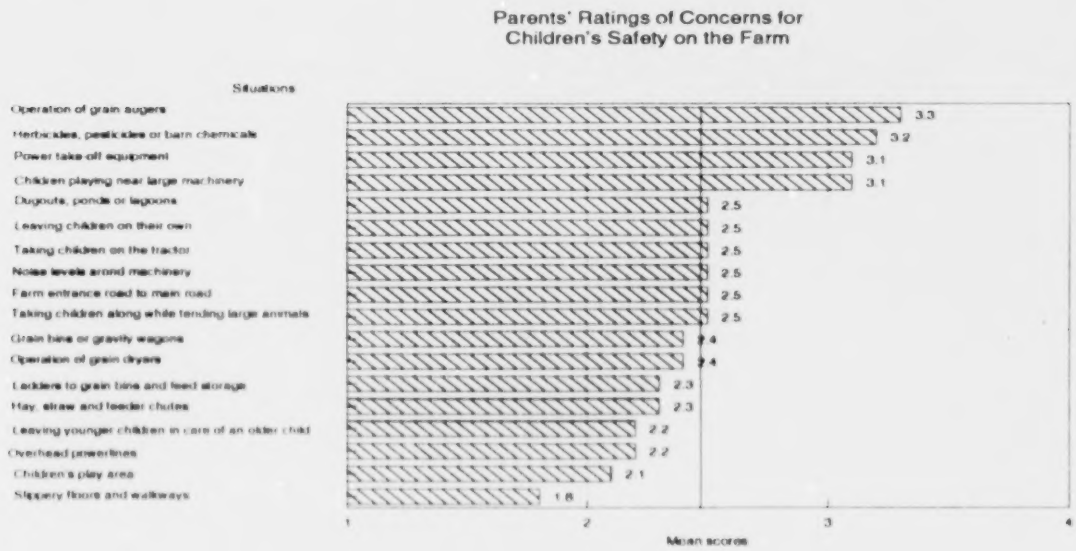
Parents' Concerns for Children's Safety on Farms

Farm living with its variety of activities, operations and situations provides many learning opportunities for children. However, many of the operations and situations also raise parents' concerns for the safety of their children. On a five-point scale, respondents rated their level of concern in 1993 for the safety of their children under 16 years of age in respect to 18 types of situations common to most farms. The mean ratings of the situations are shown in Figure 18, listed from those of greatest concern for children's safety to those of least concern. The average rating summed across all the situations is 2.5.

Situations presenting the greatest concern for children's safety in 1993 were the operation of the grain auger ($M = 3.3$), power-take-off equipment ($M = 3.2$), pesticides, herbicides and barn chemicals ($M = 3.1$) and children playing near large machinery ($M = 3.1$). Moderate concern was expressed in respect to children's safety around dugouts, ponds or manure lagoons ($M = 2.5$), leaving children alone while tending to farm chores ($M = 2.5$), taking children along on the tractor ($M = 2.5$), noise levels around machinery ($M = 2.5$), the farm entrance to the main road ($M = 2.5$) and taking children along while tending large animals ($M = 2.5$). On average there is slight to moderate concern for children's safety in respect to grain bins or gravity wagons ($M = 2.4$), the operation of grain dryers ($M = 2.4$), ladders to grain bins and storage areas ($M = 2.3$) and hay, straw and feeder chutes ($M = 2.3$). Slight or no concern

was expressed in respect to leaving children in the care of an older child (M = 2.2), the children's play area (M = 2.2), overhead power lines (M = 2.1) and slippery floors and walkways (M = 1.8).

Figure 18



Average ratings, however, do not recognize differences among families. For example, safety concerns among families with more young children are different from those with fewer young children. Parents in families with three or more children under 13 years of age expressed significantly greater concern about leaving their younger children in the care of an older child (M = 2.8) than in families with one or two children under 13 years (M = 1.9, t = 2.74, p<0.008).

The entrance of the farm road to the main road or highway poses greater concerns for children's safety in some families than in others. In particular, in families with three or more children under 13 years parents are more concerned about safety at the farm road entrance to the main road (M = 2.8) than in families with one or two children under 13 years of age (M = 2.3, t = 2.30, p<0.02). Concern about the farm entrance to the main road relates, in part, to the speed of the traffic and the dangers associated with the school bus picking up and dropping off the children at this point.

Overall, differences in the level of concern for children's safety among parents of farm families are associated with two factors: (a) the extent of the parents' work on the farm and (b) the presence of adults in the home. Concerns for children's safety relate to the number of hours parents work on the farm. In families in which the husband works more than 40 hours a week on the farm during the summer months, parents are much more concerned about leaving their children on their own while they work on the farm (M = 3.3) than in families in which the husband works less than 40 hours a week (M = 2.4, t = 2.44, p<0.02). However, far greater concern for children's safety is expressed by parents of families in which the wife works on the farm more than 40 hours a week during the winter months (M = 4.3) than by parents of families in which the wife works on the farm less than 40 hours a week during the winter months (M = 2.5, t = 2.50, p<0.02).

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Other parents who have greater concerns regarding the safety of their children under 16 years of age are those who take the children along while working with farm machinery or tending to farm chores. These parents are more concerned about the safety of taking children with them on the tractor ($\underline{M}$ = 2.9) than are parents who do not take their children along while working on the farm ($\underline{M}$ = 2.1, $\underline{t}$ = 3.18, $\underline{p}$<0.002). They also express greater concern about leaving the children on their own while they work on the farm ($\underline{M}$ = 2.9) than parents who do not take their children along while working on the farm ($\underline{M}$ = 2.1, $\underline{t}$ = 2.86, $\underline{p}$<0.006). Further, they are more concerned about leaving their children in the care of an older child ($\underline{M}$ = 2.6) than are parents who do not take their children along while working on the farm ($\underline{M}$ = 1.8, $\underline{t}$ =2.71, $\underline{p}$<0.008).

The presence of additional adults in the home significantly reduces the level of concern for the safety of children under 13 years in a number of situations (Table 3). In homes where there are children over 15 years of age or other adults who could assist with caring for younger children, parents are less concerned about the safety of the children's play area ($\underline{M}$ = 1.8), about leaving children on their own while attending to farm chores ($\underline{M}$ = 2.1) or leaving their younger children in the care of an older child ($\underline{M}$ = 1.9) than in homes where there are no adults or children over 15 years to help out with caring for the younger children (Means = 2.5, 3.1 and 2.7, respectively). The caring eye of an additional adult also lessens parents' concerns about the safety of their under 13-year-olds in situations such as dugouts, ponds or lagoons ($\underline{M}$ = 1.9), the farm entrance road to the main road or highway ($\underline{M}$ = 2.0), slippery floors in barns ($\underline{M}$ = 1.5) and taking children on the tractor ($\underline{M}$ = 2.2). Without the assistance of additional adults, parents are much more concerned about the safety of their children under 13 years around dugouts, ponds or lagoons ($\underline{M}$ = 3.1), the entrance road from the farm to the main road ($\underline{M}$ = 2.9), slippery barn floors or walkways ($\underline{M}$ = 2.0) and with taking children on the tractor ($\underline{M}$ = 2.8). Across all 18 situations, parents with children under 13 years and no other children over 15 years or adults in the home rated their level of concern for the safety of their children significantly higher ($\underline{M}$ = 3.7) than parents with children under 13 years who also have children over 15 years or other adults in the home ($\underline{M}$ = 3.1, $\underline{t}$ = 2.94, $\underline{p}$<0.005).

Table 3. Mean ratings and standard deviations of safety concerns for children of parents in families with children under 13 years and (a) no other adults or children over 16 years and (b) with adults or children over 16 years

	Families with children under 13 years of age							
	(a) No older children or other adults			(b) With older children or other adults				
Type of safety concern	N	Mean	SD	N	Mean	SD	t	p value
Slippery floors and walkways	40	2.0	1.08	26	1.5	0.76	2.25	<0.03
Noise levels around machinery	48	2.7	1.33	35	2.2	0.97	1.41	NS
Herbicides, pesticides or barn chemicals	49	3.5	1.29	34	2.9	1.29	2.01	NS
Leaving younger children in the care of an older child	29	2.7	1.49	35	1.9	0.88	2.90	<0.005
Children's play area	53	2.5	1.26	34	1.8	0.78	3.61	<0.001
Farm entrance road to the main road	51	2.9	1.22	38	2.0	0.88	3.97	<0.001
Farm dugouts, ponds or manure lagoons	40	3.1	1.39	26	1.9	0.82	4.02	<0.001
Overhead power lines	46	2.1	1.09	37	1.9	1.05	0.59	NS
Power take-off equipment	49	3.0	1.47	35	3.2	1.27	0.69	NS
Leaving children on their own while attending to farm chores	31	3.1	1.19	31	2.1	1.25	3.23	<0.002
Children playing near large machinery	43	3.3	1.32	36	3.0	1.21	1.14	NS
Hay, straw and feeder chutes	21	2.7	1.59	19	2.3	0.92	1.09	NS
Ladders to grain bins and feed storage	49	2.4	1.24	32	2.2	1.97	0.77	NS
Taking children on the tractor	46	2.8	1.25	32	2.2	1.08	2.20	<0.03
Taking children along while tending large animals	33	2.7	1.26	23	2.3	1.05	1.36	NS
Operation of the grain auger	44	3.2	1.56	36	3.4	1.10	0.51	NS
Grain bins or gravity wagons	43	2.5	1.39	32	2.3	1.19	0.78	NS
Overall safety concern	58	3.7	0.94	40	3.1	1.00	2.94	<0.005

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It is apparent that parents in families with children under 13 years and with no other adults or children over 15 years in the home are aware of the many farm situations that can be dangerous for young children. They also recognize that to reduce the potential for harm to their young children in such situations, they need assistance in caring for their children. As reported earlier, a significant number of parents who do not use child care on a regular basis because it is unavailable or inaccessible, also take their children along while they work on the farm. These parents are much more concerned about the safety of their children in a number of situations than are parents who indicate that they either do not need or do not want child care services on a regular basis (Table 4).

Table 4. Mean ratings and standard deviations of safety concerns for children by parents who indicate that child care services are (a) unavailable or inaccessible and (b) not needed or wanted

	Child care services							
	(a) Unavailable or inaccessible			(b) Not needed or wanted				
Type of safety concern	N	Mean	SD	N	Mean	SD	t	p value
Slippery floors and walkways	15	2.4	1.05	46	1.6	4.39	2.37	<0.02
Noise levels around machinery	22	3.0	1.15	54	2.4	1.34	1.93	NS
Herbicides, pesticides or barn chemicals	22	3.8	2.23	52	3.0	3.02	2.35	<0.02
Leaving younger children in the care of an older child	17	2.8	1.55	41	1.8	1.02	3.1	<0.003
Children's play area	23	2.7	1.07	53	1.8	1.18	2.94	<0.004
Farm entrance road to the main road	21	3.1	1.20	58	2.2	1.20	3.18	<0.002
Farm dugouts, ponds or manure lagoons	17	2.7	1.21	40	2.4	1.48	0.75	NS
Overhead power lines	23	2.1	1.08	53	2.2	1.23	0.41	NS
Power take-off equipment	22	3.4	1.33	55	3.1	1.46	0.76	NS
Leaving children on their own while attending to farm chores	16	3.8	1.17	41	2.1	1.19	4.85	<0.001
Children playing near large machinery	23	3.5	1.24	53	3.0	1.43	1.44	NS
Hay, straw and feeder chutes	12	2.7	1.42	27	2.1	1.29	1.30	NS
Ladders to grain bins and feed storage	23	2.6	1.12	50	2.2	1.21	1.37	NS
Taking children on the tractor	21	3.2	1.17	49	2.1	1.17	3.43	<0.001
Taking children along while tending large animals	12	3.4	1.24	40	2.1	1.04	3.60	<0.001
Operation of the grain auger	22	3.5	1.41	54	3.1	1.29	1.08	NS
Grain bins or gravity wagons	22	2.8	1.41	45	2.3	3.71	1.42	NS

While working on the farm, parents who indicate child care services are unavailable or inaccessible are more concerned about the safety of their children either when left on their own ($\underline{M}$ = 3.8) or in the care of an older child ($\underline{M}$ = 2.8) than are parents who indicate they do not need or want regular child care services ($\underline{M}$ = 2.1 and $\underline{M}$ = 1.8, respectively). In work situations they are greatly concerned about the children's safety around large animals ($\underline{M}$ = 3.4) or on the tractor ($\underline{M}$ = 3.2) whereas parents who indicate they either do not need or want regular child care services are much less concerned about their children's safety in regard to taking children along to tend large animals ($\underline{M}$ = 2.1) or on the tractor ($\underline{M}$ = 2.1). Other situations that raise greater concerns for children's safety among parents who indicate that child care services are unavailable or inaccessible are the children's play area ($\underline{M}$ = 2.7) and the farm entrance road to the main road ($\underline{M}$ = 3.1). Parents who indicate they do not need or want regular child care services are less concerned about the safety of the children's play area ($\underline{M}$ = 1.8) or about the farm entrance to the main road or highway ($\underline{M}$ = 2.2).

With the multitude and variety of farm tasks, family responsibilities and financial pressures facing farm families today, it could be expected that husbands and wives experience stress. However, the purpose of this survey was not to study stress levels experienced by farm parents. Rather, in an attempt to gain some further insight into the factors that affect child care and child safety, respondents were asked to rate their concern about the level of stress they experienced. Because the respondent, who could be either the husband or the wife, rated the concern about their own and their spouse's personal level of stress, these ratings were combined to provide an index of concern regarding parental level of stress.

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Factors associated with concern regarding the level of parental stress are presented in Table 5. Parents with one or two children under 13 years of age are more concerned about their stress level ($\underline{M} = 2.9$) than are parents with three or more children under 13 years ($\underline{M} = 2.3$, $\underline{t} = 2.01$, $\underline{p} < 0.05$). Parents who used child care for more than 5 hours a day during peak times in 1993 are more concerned about their stress level ($\underline{M} = 3.1$) than are parents who used child care for less than 5 hours a day during peak times ($\underline{M} = 2.2$, $\underline{t} = 2.59$, $\underline{p} < 0.01$). Parents who left their children on their own more than 5 times a month while they worked on the farm are considerably more concerned about their stress level ($\underline{M} = 3.4$) than are parents who left their children on their own less than 5 times a month while they worked on the farm ($\underline{M} = 2.3$, $\underline{t} = 3.15$, $\underline{p} < 0.004$).

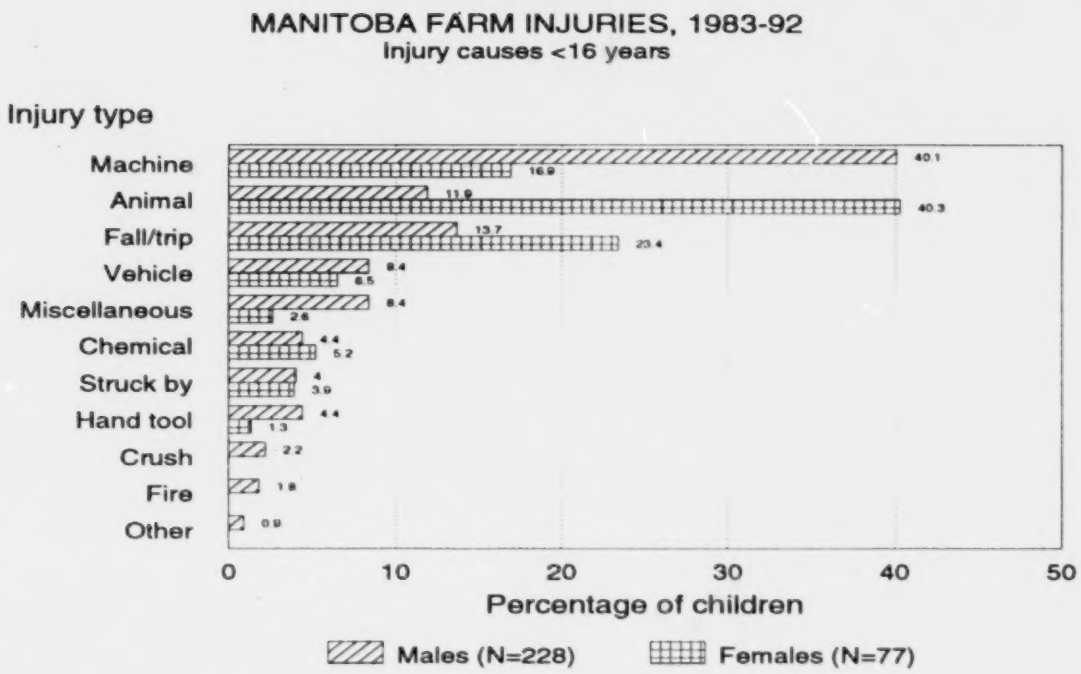
Table 5. Factors associated with parents' ratings of concern regarding their personal level of stress

Factors associated with concern regarding stress	Parents' rating of concern regarding their stress level			t	p level
	N	Mean	SD		
Families with 1 or 2 children under 13 years	56	2.9	1.37		
Families with 3 or more children under 13 years	38	2.3	1.27	2.01	<0.05
Child care used less than 5 hours a day during peak times	36	2.2	3.78		
Child care used 5 hours or more a day during peak times	24	3.1	2.94	2.59	<0.05
Children left on their own less than 5 times a month	20	2.3	1.00		
Children left on their own 5 times or more a month	15	3.4	2.63	3.15	<0.004
Regular child care services unavailable or inaccessible	25	3.2	1.29		
Regular child care services not needed or not wanted	60	2.4	1.34	2.61	<0.01
Net income derived from farming is 75% or less	40	3.0	1.51		
Net income derived from farming is more than 75%	71	2.5	1.25	2.24	<0.03

The availability or accessibility of child care services was also a factor associated with concern about personal stress. Parents who indicated that child care services were unavailable or inaccessible are considerably more concerned about their stress level ($\underline{M} = 3.2$) than are parents who either do not need or want child care services ($\underline{M} = 2.4$, $\underline{t} = 2.61$, $\underline{p} < 0.01$). Net income also is a factor that contributes to concern about personal stress. In families in which 75 percent or less of their net income was obtained from farming, parents are more concerned about their level of stress ($\underline{M} = 3.0$) than in families in which more than 75 percent of their net income was derived from farming ($\underline{M} = 2.5$, $\underline{t} = 2.24$, $\underline{p} < 0.03$).

Some of the situations in which parents express a high level of concern for children's safety correspond to the type of injuries children under 16 years have had in Manitoba between 1983 and 1992 (Figure 19). The largest percentage of injuries has been with machines, and these are the greatest safety concerns of parents: grain augers, power-take-off equipment and children playing around large machinery. However, parents express only moderate concern about children handling large animals, yet the number of farm injuries to Manitoba children under 16 years caused by animals equals that of machinery, particularly for girls. Of least concern to parents in this survey are the children's play area and slippery floors and walkways, yet falls and trips are the third largest cause of farm injuries to Manitoba children.

Figure 19



Source: MHSC compiled by Manitoba Labour

Farm Safety and Age of Children

Farm children grow up in an environment rich in learning opportunities which at the same time is a worksite beset with many dangers. All parents want to optimize the learning opportunities and reduce the situations which could cause harm. When assessing whether a situation is safe for a child several factors need to be considered.

1. How dangerous is the situation itself? Parents do evaluate the safety of the situation as is evident in their concern about augers, power take-off equipment and children playing around large machinery.
2. Is the child physically capable of handling the situation? To operate equipment, children need to be able to comfortably reach all the controls on the equipment and to have the strength required to operate such controls.
3. Does the child understand the situation; for example, the operation of the equipment? The Swiss psychologist Piaget has demonstrated, and psychologists around the world have confirmed that before children are 6 to 7 years of age, they think only in terms of what is present to them at the moment. What they saw happen only moments before they do not take into account in making a judgement about the present situation. Not until children are 12 to 14 years of age are they able to begin to predict what might happen when several factors are involved in a situation. Thus, because there are always unknowns in farming operations, cognitive development level of children is important in assessing whether they could safely handle a task.
4. Can the child be depended on to follow instructions exactly? In this respect two aspects of normal development are relevant: the children's level of cognitive development and their natural curiosity. Therefore, one needs to ask what children might do if something unexpected occurs. Have they developed cognitively to the level that they can predict the outcome or take into account all the alternatives? One must also ask whether the children's natural curiosity will entice them to try something new. Children are naturally curious and will try out new ways of doing things just to see what happens.

5. Is the child alone in the situation or with other children? If the child is with other children, what influence will the other children have on the child? When alone in the situation, farm children may know and do what they have been taught to be safe? However, when playing with non-farm children on the farm, new ideas may be offered which they will experiment with together. Ninety percent of the respondents in this survey indicated that non-farm children visit and play with their children. At such times it is important to consider what would be safe for the average child, not just for farm children.

The question in this survey asked at what age the respondent would consider it safe for the average child to participate in a number of activities common to most farms. Figure 20 shows the youngest age and range of ages that respondents consider safe for an average child to participate in farm activities.[3]

Across the various situations and activities, the largest range in the youngest age at which the respondents consider it safe for an average child to engage in an activity are for riding with an adult on a cabless tractor (8 to 14 years), riding as a passenger on a snowmobile (4 to 9 years), driving an all-terrain vehicle (10 to 15 years) and playing alone in the farm yard (6 to 11 years). Respondents agree that the youngest age at which it is safe for a child to care for one-year-old children is between 12 and 13 years and to operate power take-off equipment, between 14 and 15 years of age.

The respondents' overall level of concern about the safety of children in various farm situations is associated with the youngest age they think it is safe to allow a child to engage in activities around the farm. The greater the overall concern about children's safety, the older the respondents think an average child should be to safely drive vehicles such as a tractor greater than 20 hp ($r = 0.24$, $p<0.01$), a half ton truck around the farm and fields ($r = 0.25$, $p<0.007$), a snowmobile ($r = 0.23$, $p<0.02$) and an all-terrain vehicle ($r = 0.28$, $p<0.003$). Similarly, the more concerned respondents are about children's safety, the older they think a child should be to ride safely on a cabless tractor ($r = 0.24$, $p<0.01$) and on a tractor with a cab ($r = 0.26$, $p<0.005$) but not in respect to being a passenger on a snowmobile ($r = 0.14$, $p =$ NS). Also, the greater the safety concerns, the older respondents think children should be to operate both a power mower ($r = 0.27$, $p<0.004$) and a push mower ($r = 0.22$, $p<0.02$), as well as grain augers ($r = 0.30$, $p<0.002$) and power take-off equipment ($r = 0.28$, $p<0.003$), but not a microwave ($r = 0.11$, $p =$ NS). In regard to handling animals, the more concerned the respondents, the older they think children should be to handle both large animals ($r = 0.24$, $p<0.02$) and small animals ($r = 0.23$, $p<0.02$). However, the level of concern for children's safety was not related to any of the children's activities including playing alone in the farmyard, caring for children under one year, or between two and four years, or being left on their own in the home.

Differences in the youngest age at which respondents considered it safe to allow children to participate in various activities relate primarily to the age of the respondents and to the husband's education level. The older the respondent, the older they think a child should be to safely drive a tractor of more than 20 hp ($r = 0.25$, $p<0.01$) and to ride safely as a passenger on a snowmobile ($r = 0.29$, $p<0.002$). The age of women respondents is associated with situations relating to children. The older the woman respondent the older she expects average children to be to safely allow them to be left on their own in the home ($r = 0.46$, $p<0.006$) and also, the older she thinks a child should be to care for 2-to 4-year-old children ($r = 0.36$, $p<0.05$). Differences in the youngest age at which it may be considered safe for an average child to safely drive a half-ton truck on the farm or in the fields relates to the education level of the husband. The higher the husband's level of education the older the child must be to be considered safe to drive a half-ton truck on the farm ($r = 0.19$, $p<0.05$).

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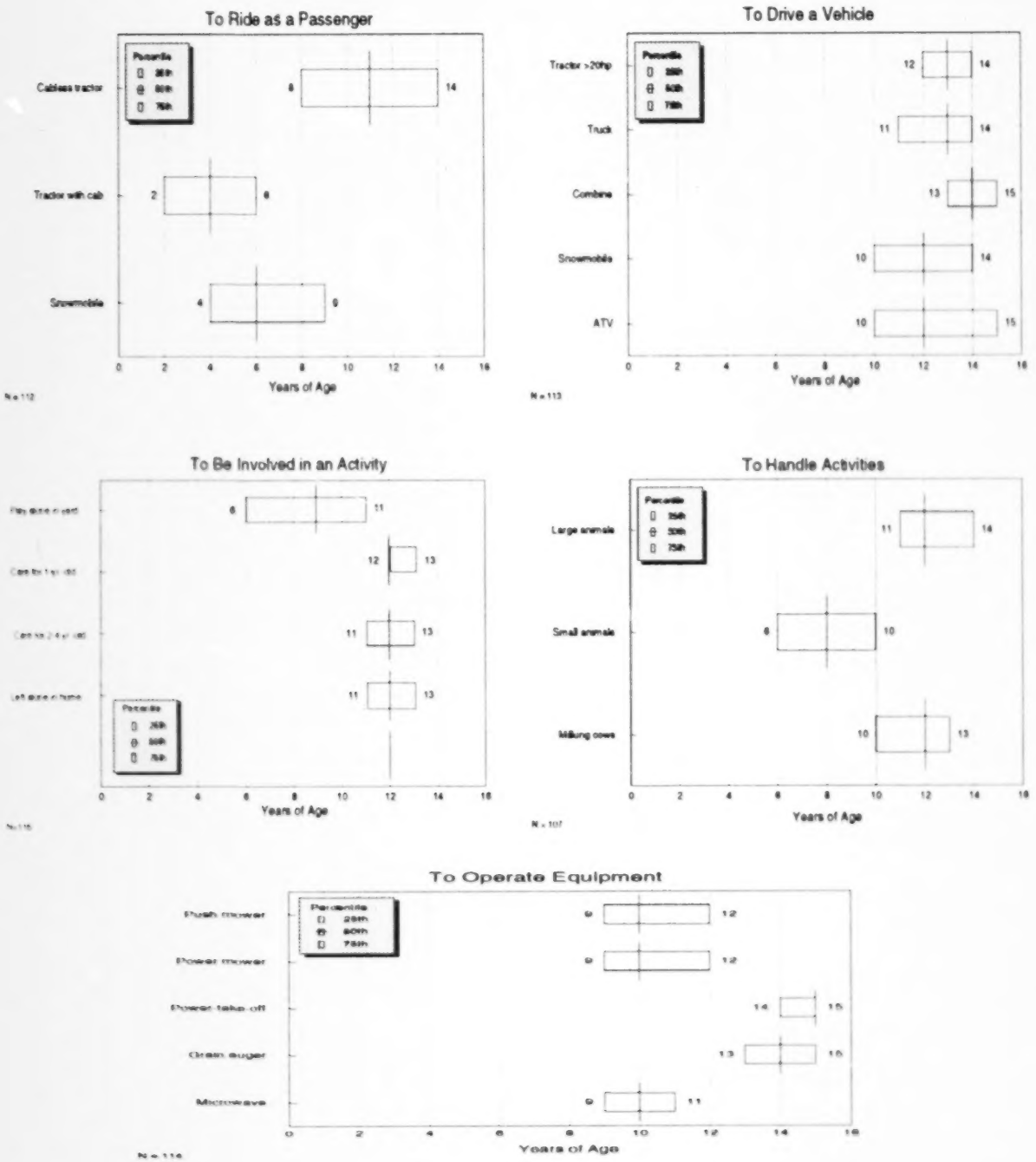
3 The bar represents the range in the youngest age at which 50 percent of the respondents consider it safe to allow an average child to participate in the activity. The 25th percentile represents the youngest age at which 25 percent of the respondents consider a situation safe for an average child, the crossbar (50th percentile) represents the youngest age at which 50 percent of the respondents consider the situation safe for an average child and the bar to the right of the crossbar represents the youngest age at which 75 percent of the respondents consider the situation safe for average children.

Figure 20

The Youngest Age at Which Respondents Think it Safe for an Average Child to Participate in Activities on a Farm

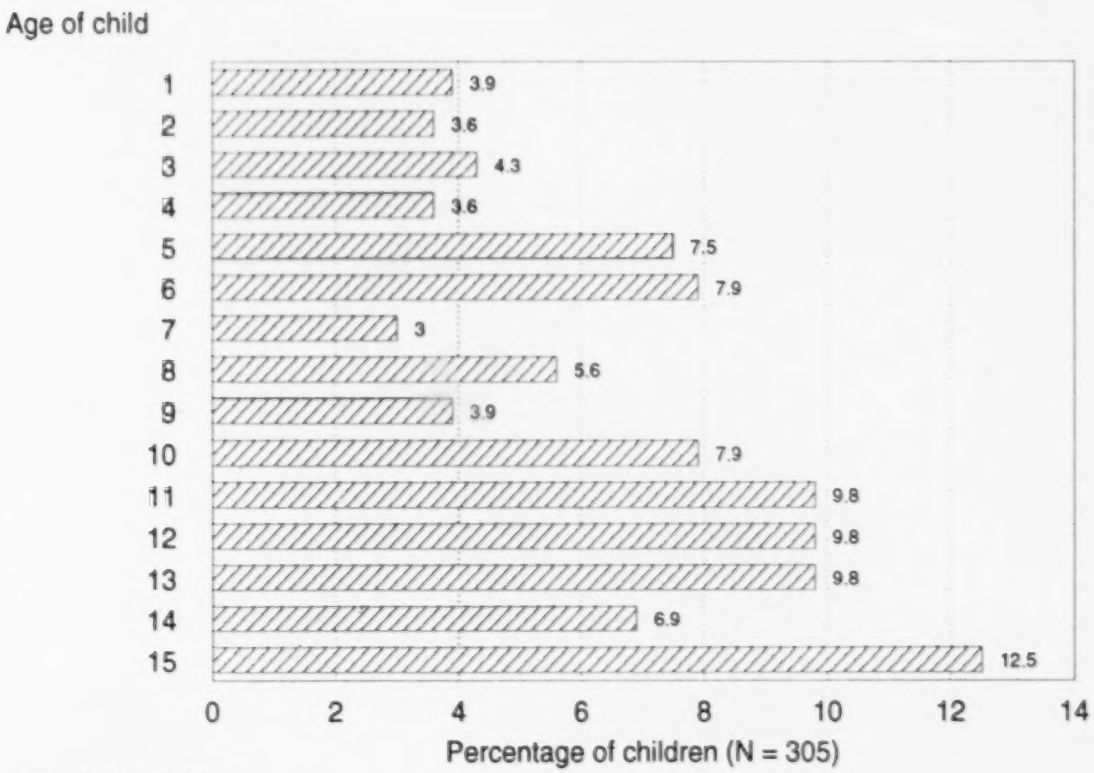


In respect to children's age and safety, the Manitoba Health Service Commission data on the age when farm children were injured between 1983 and 1992 is of particular interest (Figure 21). It may be noted that more injuries occurred to children at ages 5 and 6 years when cognitively they are still judging situations primarily in terms of the present moment and not yet fully taking into account what had occurred just previously. Another increase in the incidence of injuries to farm children is apparent between 11 and 13 years. At these ages children still do not systematically take into account several factors which may be operating in a situation at the same time. Perhaps the older respondents and those with a higher level of education are reflecting their understanding of children's cognitive development when they consider the age at which it is safe for children to participate in various activities.

Figure 21

MANITOBA FARM INJURIES, 1983-92

Age of Child When Injury Occurred



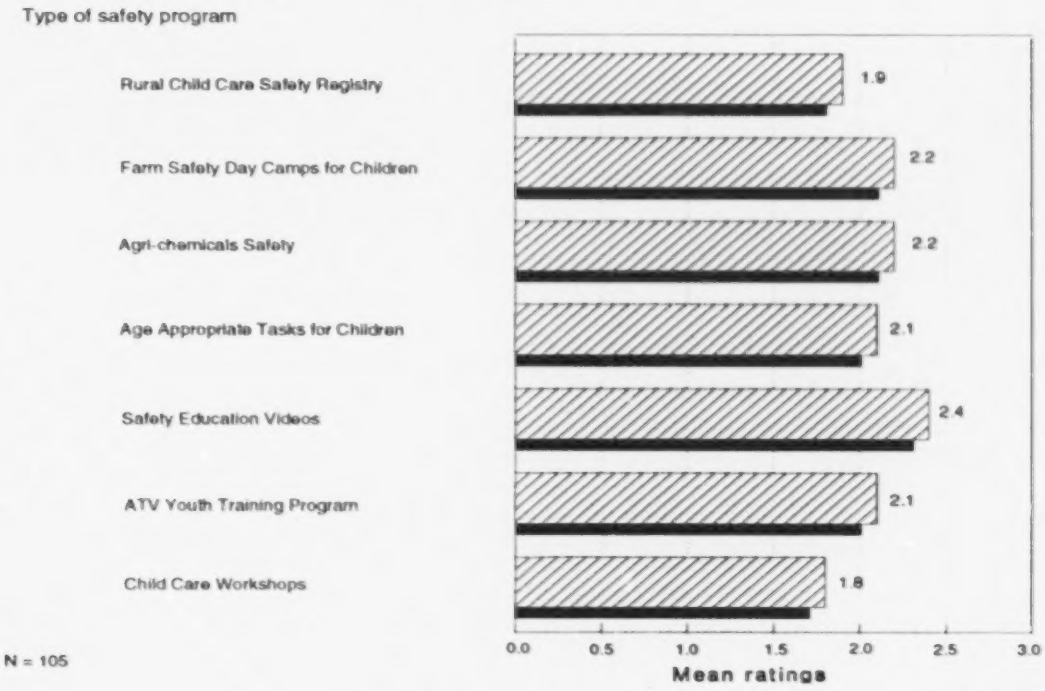
Source: MHSC compiled by Manitoba Labour

Programs on Child Safety on Farms

Respondents were asked how interested they are in having several different types of safety programs in their community. Each program was rated on a three-point scale from "Not Interested at All" (1) to "Very Interested" (3). The average ratings are shown in Figure 22. Of greatest interest are safety education videos (M = 2.4) followed by farm safety day camps for children (M = 2.2) and agri-chemicals safety (M = 2.2). In recent years, these types of safety education programs have received considerable publicity through media coverage and from farm machinery and chemical companies. The effect this publicity has had is evident in the high level of concern parents have for children's safety around augers, chemicals and power take-off equipment.

Figure 22

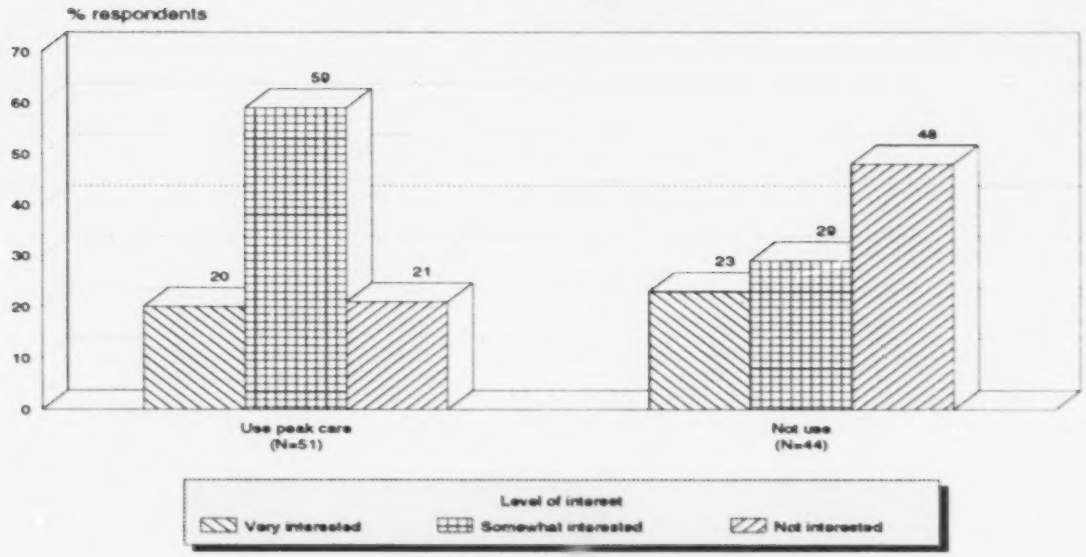
Mean Ratings of Respondents' Interest
in Safety Programs
(N=105)



Of least interest are programs relating to the care of children such as child care workshops (M = 1.8) and the Rural Child Care Safety Registry (M = 1.9). These also are the areas about which the farming community knows least and about which parents, in general, have less concern about the safety of their children. However, as shown in Figure 23, among farm families who used child care during peak times in 1993, 79 percent are either very interested or somewhat interested in the Rural Child Care Safety Registry, whereas 48 percent of those who did not use child care during peak times are not at all interested in the Registry (2df, N = 95, $X^2 = 9.38$, $p<0.009$). Considering that in 18 percent of the families in this survey there were no children under 13 years, these results suggest a significant proportion of farm families who need child care supports are interested in the Registry.

Figure 23

Percentage of Respondents Who Used Child Care During Peak Times and Interest in the Rural Child Care Safety Registry



Some of the characteristics of these interested families is evident in the correlations between the respondents' level of interest in the Registry and their safety concerns. The more interested respondents are in the Rural Child Care Safety Registry, the greater their concern about children playing around large machinery ($r = 0.39$, $p<0.001$), about taking a child on the tractor ($r = 0.29$, $p<0.01$), leaving children on their own ($r = 0.34$, $p<0.007$) and about slippery floors and walkways ($r = 0.41$, $p<0.001$). Also, the more interested respondents are in the Rural Child Care Safety Registry, the older they think a child should be to safely operate a grain auger ($r = 0.27$, $p<0.01$) or power take-off equipment ($r = 0.31$, $p<0.004$) and the older children should be to be left on their own ($r = 0.21$, $p<0.05$) or to be cared for by an older child ($r = 0.24$, $p<0.02$).

The fact that in Manitoba from 1983 to 1992 the second and third ranking cause of farm injuries incurred by children under 16 years involved animals and falls or trips suggests that more attention and publicity needs to be given to safety around animals, in barns and in children's play areas. The relatively low rating of interest in a program on age appropriate tasks suggests that parents may not be aware that the developmental level of a child is an important factor in child safety. For example, taking a 3-year-old child along on a tractor with a cab may appear to be safe--the cab is clean, air-conditioned and comfortable. While the parent is with the child in the cab it may be safe, but what happens when something goes wrong with the equipment being drawn by the tractor? The parent leaves the child in the safety of the cab, but the child is naturally curious and starts to play with all those interesting buttons. Or, as is natural for young children, the child wants to help Dad or Mom and leaves the cab without the parent even knowing it or knowing where the child is. The dangers in this situation are obvious, but the child is doing what is natural for a child of this age.

Accidents do not happen when and in the way we expect them; if they did, they would not be accidents.

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CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study is to survey the current use of child care and the type of child care needs that exist among farm families in Manitoba. Major factors in determining the need for child care generally are family resources and, among farm families where the workplace is also the home, child safety. Family resources include the availability of parents or other caregivers to care for their children, as well as the accessibility and affordability of child care services.

In 1992, the Rural Child Care Safety Registry was established on a trial basis in several Manitoba municipalities to provide child care that would be available when farm families need the service, near enough to the farm home to be accessible and a service farm families can afford. In the municipalities in which the Registry has been in existence for one year, the farmers do know of it. Considering the number of questionnaires sent to farmers in the municipalities in which the Registry had been established approximately one year prior to this survey and based on the overall response rate, it is estimated that 44 percent of the respondents in these communities knew of the Rural Child Care and Safety Registry. That few farm families had used the Registry to date probably stems from the fact that farm parents continued to rely on the relatives, friends and neighbours who had previously helped them out during peak times. One year is not sufficient time to adequately determine whether the Registry will serve the specific needs of farm families for child care.

The data from this survey indicate that there are farm families who are in great need of flexible and accessible child care support--for two thirds during peak times in the farming operations and for at least one-fourth of full-time farmers, on a more regular basis. These full-time farmers derive more than 75% of their net income from farming and generally do not have the resources of older children or other adults in the home. Although these families use child care during peak times, at other times the parents leave their children on their own when they work on the farm or frequently take their young children along while they work with farm machinery and around livestock. For some of these families child care is not available or accessible and for others, particularly those with smaller farm operations, it may not be affordable.

The type of child care support farm families prefer is either a caregiver available to come into the home during peak times to both care for the children and prepare meals or a subsidy to hire additional help with the farm work thus allowing the mother to care for the children. They do not want child care fee subsidies which implies that their children will have to attend a day care centre that qualifies to accept children whose child care fees are subsidized. Instead, they suggest that a subsidy be made to hire the help needed on the farm, either for child care assistance or help hired to replace the mother in farm operations.

Given the findings from this survey, it is apparent that child care supports are needed by farm families. However, the traditional urban day care model, which is designed primarily for parents who work regular job hours, cannot meet the unique needs of farm families. Furthermore, because of the distance between farms of which only one-third have children under 13 years, the population of children is not sufficient to support a day care centre within reasonable driving distances. If at one time there were sufficient children in an area to justify the establishment of a day care centre, such a centre could operate only for the period of time that the cohort of children are still of day care age. Therefore, it is recommended that a model of child care suitable to farming conditions be developed and implemented.

A child care service for farm families would not only need to be available, accessible and affordable, but also flexible and adaptable. Farm families need a child care service they can access at any time, that can provide care on any day of the week including weekends and for varying hours during the day including overnight care. Child care would be needed by farm families primarily during peak times, generally seeding and harvesting, but also at other times of the year depending on the type of farm operation.

Many of the elements required for a child care service for farm families already exist in rural communities. Therefore, the development of a rural child care service lies, in part, in the coordination of existing services. Extension of services in respect to some aspects may be required.

Farmers wishing to use a child care service need to know how and where they can access it. Agricultural offices already exist throughout the Province. These offices are staffed by agricultural representatives who know the local farming conditions and the agricultural needs of farmers and by home economists whose education and training includes the needs of families and development and care of children. The Agricultural Office could, therefore, serve well as a coordinating centre for child care services to farm families. A 24-hour telephone answering service or answering machine that farmers could call when they are in need of child care, would greatly assist farmers whose work hours on the farm, particularly during peak periods, do not correspond to those of government offices.

Personnel in the Agricultural Office could be responsible for identifying, and perhaps also for screening, potential caregivers in the community. In municipalities where the Rural Child Care Safety Registry has been established, some caregivers have already been identified. Caregivers could provide the child care in their own homes or they may be itinerant caregivers who go to the farm home to care for the children. The home economist could arrange for basic child care, first aid and child safety training for identified caregivers.

For some farm families, the most appropriate form of child care support may be extra hired help that would then allow the mother to care for the children. The agricultural representative and home economist could assess the circumstances of the farm family to determine which alternative would be most appropriate.

Some farm families may not use child care services because they cannot afford them. Subsidies could be provided through the Agricultural Office for farm families to assist in paying for child care services provided either in the farm home or in the caregiver's home. Such subsidies should apply equally to hire extra help if this frees the mother to care for her children.

An identifiable location that co-ordinates rural child care services in communities would facilitate itinerant child caregivers to move from one community to another. Although seeding and harvesting are peak times for most farmers, with the diversity of farming operations in Manitoba there are other peak times such as haying, calving and farrowing when child care also is needed by farm families.

Manitoba has been recognized as a leader in the development of a child care system that serves the urban community well; surely our Province also can respond effectively and efficiently to the unique child care needs of farmers, a segment of our population that contributes significantly to the economy of the Province.

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APPENDIX A

The Rural Child Care Safety Registry: Final Report From The Manitoba Women's Institute

On August 21, 1991, representatives of the Manitoba Women's Institute and its Rural Child Care Committee met with the Honourable Harold Gilleshammer, Minister of Child and Family Services in the Manitoba Government to express their grave concern regarding the safety of children living on farms and requesting support for appropriate forms of child care that are compatible with the type of needs of farm families. The nature of farming operations which are seasonal, highly dependent on weather conditions and with unpredictable working hours indicate that unique and exceedingly flexible forms of child care are needed by farm families. A suitable form of child care for farm families would need to accommodate children during peak times of farming operations, for short periods of time, overnight if necessary, and on varying days. It was recommended to the Minister that central registries of child caregivers or child minders be established which could be accessed by farm families when needed (see Attachment 1).

On May 12, 1992, the Manitoba Women's Institute met with Theresa Harvey, Assistant Deputy Minister to the Minister Responsible for the Status of Women, Ruth Mitchell, policy analyst with Manitoba Women's Directorate, Donna Hastings, specialist with Manitoba Agriculture Family Living and Gisela Rempel, Director of Child Day Care. At this meeting the Government presented a draft model of a child care registry considered suitable for a pilot project in Manitoba (see Attachment 2). Financial assistance to cover expenditures such as postage, mailing, publicity and conference calls was also offered to launch pilot projects in the fall of 1992. Subsequently, the Manitoba Women's Institute requested additional funds to employ a coordinator and received a one-time grant of $17,000 for the implementation of a Child Care Safety Registry.

A press release on June 1, 1992 from the Manitoba Women's Institute announced the Rural Child Care Registry as a pilot program to facilitate the matching of community caregivers with families in need of care for their children during peak periods of farm operations. The registries which list caregivers available in an area, would be established and maintained at a local level. Families requiring child care would then contact the registry and the names of available caregivers would be supplied.

In August, 1992 in an advertisement for a Rural Child Care Registry Project Coordinator, the project objectives were defined to include:

1. "To ensure the safety of young children at peak farm work periods (usually spring and fall) when family caregivers are required to work long and irregular hours, often leaving their young children in unsupervised or hazardous situations for lack of available options, and

2. "To alleviate the emotional distress of family caregivers who find themselves in this position by establishing a network of temporary caregivers willing - often with short notice and for irregular time periods - to provide skilled supervision for young children within each farming community at a reasonable cost."

The concept of the Rural Child Care Registry was promoted through the press and through the distribution of pamphlets. A Rural Child Care and Safety Registry Kit was also developed which included samples of the promotional materials as well as an outline of the "Steps to Follow in Setting up a Local Child Care Safety Registry."

In January, 1993 Linda Friesen, the coordinator, reported that a Rural Child Care Registry had been established in the Glenella/Waldersee (Plumas) area and that it had been successfully used by farm families. At the 1993 Farm Women's Conference seven additional communities expressed interest in the Registry. By June, 1993, Rural Child Care Registries were operating with identified community contact persons in the following municipalities: Minnedosa (Basswood), Swan River, Glenella (Plumas), Gladstone, Riverton, Arborg, and Killarney. Registries were also being established in Melita and Stonewall but were not yet operating.

Overall, this pilot project appears to have been successful. Positive feedback has been received from those farm families who did use the Registry. However, the number of families who used the Registry was still relatively few which may be attributed to a number of factors.

1. **Awareness of the Rural Child Care Registry.** Farm families were not yet aware of the Rural Child Care Registry as a child care alternative. The Glenella/Waldersee Registry, which was in operation for two years, was well utilized.

2. **Insufficient caregivers on the Registry list.** Among some of the more recently established registries, the number of caregivers listed on the Registry was insufficient to provide choices for the families.

3. **Distance**. In some communities the farms are so widely dispersed that distance to travel to the caregiver was a significant deterrent.

4. **Off farm employment**. In communities where there is considerable off farm employment, families have already made arrangements for child care on a regular basis.

5. **Cost**. The cost of child care is clearly a factor for farm families. Particularly in seasons like that of 1993, many farm families would qualify for child care fee subsidies were these available for Registry users.

6. **Community cooperation**. In addition to the active involvement of the Manitoba Women's Institute and its local organizations, the media, including radio and the press, and local agencies including home economists, public health nurses, and the Agriculture Employment Services offices provided excellent support.

Recommendations

The seasonal nature of agriculture requires a very flexible model of child care and the Registry concept was pursued to fit that need. Because several communities were not able to develop the concept to set up a workable registry, the following recommendations are suggested.

1. Education. An aggressive education campaign on safety, particularly targeted on the safety of rural children, must be launched. Farm families must be encouraged to consider child care expenses as a cost of doing business.

2. Affordability. Many farm families require financial support to pay for child care. Some method must be found to provide subsidies to those in need, similar to those made available to urban families, even though the child care is not provided in the traditional child care centre.

3. Alternative Forms of Child Care. Distance, irregular hours and seasonal requirements are barriers to the child care centre approach. This necessitates a very flexible program which will be inevitably influenced by demographic changes continually taking place in the communities.

4. Regulations. Regulations designed for the urban child care centre are too inflexible to allow safe child care to be provided for children on farms in peak work seasons. The issues of providing a physical and mentally stimulating environment and early childhood education become minor points in comparison to injury prevention since the farm children are involved in care for relatively short periods of time.

An option must be available that will keep farm children away from the potential dangers found on busy farm work sites.

Respectfully submitted by:

Audrey Grier, President, Manitoba Women's Institute
Marion McNabb
Lois Neabel
Joyce Johnson
Marion Perrett, Executive Director, Manitoba Women's Institute

Attachment 1

Summary of the presentation and discussion regarding the Federated Women's Institutes of Canada and the Rural Child Care Survey Report with the Honourable Harold Gilleshammer, Minister of Child and Family Services, Manitoba Government, August 7, 1991.

Honourable Gilleshammer:

I Manitoba Women's Institute is a voluntary non-partisan, non-sectarian, non-racial educational organization with eighty local branches and 1300 members spread across the province, active in Manitoba since 1910. 96% of the members live outside Greater Winnipeg.

II The Manitoba Women's Institute Executive and Child Care Committee appreciated the opportunity to meet with you, your Deputy Minister, Executive Assistant and the Manitoba Child Care representative on August 7th to discuss recommendations and ideas on Child Care - using the FWIC Child Care recommendations as the basis. The Federated Women's Institutes of Canada is a coordinating body for the ten provincial organizations and has over 35,000 members.

III Federated Women's Institutes of Canada (FWIC), with funding from the Federal Government Child Care Initiatives Fund, in 1989-90, conducted a survey across Canada to determine the child care needs of rural families. The recommendations contained in the report are attached.

IV Manitoba Women's Institute fully supports the recommendations, some of which are more appropriately addressed to the Government of Canada, but which we would also urge the Manitoba Government to support in order to bring changes in funding, in income tax credits and in subsidies as they relate to child care.

The recommendations which can be specifically addressed by Manitoba Government are dealt with in part in this presentation.

1. Our focus is on "child care" and not on "day care" specifically. Our major concern is the safety of our children.

2. Rural areas present situations that are unique and problems of child care require different solutions than those applicable in urban areas. Farming is the only occupation where children are cared for in the workplace. Factors that influence the type of care needed are:

   - lower family income
   - farm partners with off-farm jobs
   - seasonal nature of farming
   - unpredictable working hours especially in harvest
   - rural depopulation resulting in too few children to sustain day care centres.

3. In many communities these factors make day care centres impractical unless and until present regulations for licensed day care are relaxed to accommodate:

   (a) the facilities available in small towns. Often there are buildings or rooms in schools, hospitals and churches that could be used for child care but which do not meet all of the regulations required under the present Guidelines in Manitoba. We see a need for some flexibility in these regulations even as we recognize the need for high standards. The use of many of these facilities could still be a safer environment than an unattended home, a barnyard or a piece of machinery.

(b) the educational requirements of the caregivers. Early childhood education is a secondary concern since often the length of time for which child care is needed is short, is seasonal, is during sleep time, varies daily, is dependent on the weather, etc.

(c) the hours of operation and the need for part-time schedules. Because of a predominance of part-time employment of mothers in small towns, the seasonal busy times on farms, many families do not fit into the regular child care programs available. Rural areas have multi-faceted needs.

4. We believe that many parents prefer private personal care for their children rather than the structured day care centre program. We see possibilities for the "Child Minder" approach and anticipate shortly receiving details of its program in meeting child care needs.

5. The Survey Report recommends the use of Farm Labour Pool offices to provide central registries for child care givers.

We think this could be more realistically accomplished on a local community level. A simple registry that would identify and list care givers (or child minders) could be facilitated in whatever office is easily accessible to people registering or requiring service. It might be government offices, hospitals, schools, service organizations, a private day care, or an individual that would keep the registry. Care givers would be required to gain basic child care skills, First Aid, a knowledge of farm safety, child development, play activities, but would not need Child Care I, II, or III levels of training. Families using the service would pay for it.

Government's role may only need to be in terms of supporting and recommending the idea; facilitating the registry in some areas, encouraging communities to identify their needs for child care, and then allowing them to develop creative solutions.

Without extended families available for extra child care, communities need to be encouraged to find their own solutions. The health and safety of children is not just a family affair. It is a community responsibility to find alternatives to leaving children in high risk situations.

6. We concur with the aims and goals of "Kids First" in supporting the right of families to choose the form of child care which best suits their needs, and in lobbying for a child care program with equitable benefits to all parents.

Federated Women's Institutes of Canada's Survey report states "that the present tax system discriminates against stay at home parents, and there is a strong feeling (among respondents) that governments should review their policies and address these inequities". We urge your support of a review and changes in policies.

In conclusion, may we again say thank you for hearing us. Manitoba Women's Institute would be happy to work with your government in attempting to reach these goals.

Submitted on behalf of Manitoba Women's Institute Executive and Rural Child Care Committee:

Joyce Johnson, Provincial President, Rivers
Lois Neabel, Provincial President-Elect, Minnedosa
Gwen Parker, Executive Secretary, Ste. Agathe
Marion McNabb, F.W.I.C. Convenor of National Survey, Minnedosa
Carolynne Nickel, Manitoba Women's Institute Government Appointed Board Member, Solsgirth

(The above are all rural farm women.)

Attachment 2

Model suggested by the Child Day Care Branch of Family Services to meet the need of farm families as presented by the Manitoba Women's Institute.

Executive Summary:

The Manitoba Women's Institute met with the Premier to discuss recommendations and ideas on Rural Child Care, based on the Federated Women's Institutes of Canada Rural Survey Project 1990 and the Alberta Rural Child Care Project. Subsequently, the Minister of Family Services and the Minister responsible for the Status of Women and for Lotteries met to discuss the development of a draft model for Manitoba of a child care registry for rural families to utilize during seeding and harvest.

Officials from the Child Day Care Branch of Family Services, the Home Economic Branch of the Department of Agriculture and the Manitoba Women's Directorate met to consider the Federated Women's Institutes of Canada Rural Child Care Survey Project 1990, the Alberta Rural Child Care Project, and to draft a model suitable for a pilot project in Manitoba.

A discussion paper has been prepared, and is attached, which outlines a model that would meet the requirements suggested by the Women's Institute. It respects and recognizes established provincial Child Day Care regulations as well as the identified needs of the rural community.

The paper presents, for ministerial consideration, the elements of a proposed model and pilot project. It includes the potential long and short term implications of the proposed model and pilot, for the Government of Manitoba. The Manitoba Women's Institute has not requested any subsidies for the pilot project, and none are suggested in the model. However, should the Registry prove successful and/or be expanded, there could well be requests for subsidies for families who could not otherwise afford to access the program.

Subject:

Draft model of child care registry for rural families to utilize during seeding and harvesting.

Summary:

The Manitoba Women's Institute met with the Premier to discuss recommendations and ideas on rural child care, based on the Alberta Rural Child Care Project.

Subsequently, the Minister of Family Services and the Minister responsible for the Status of Women and for Lotteries met to discuss the possible development of a draft model for a child care registry of rural families to utilize during seeding and harvest.

Officials from the Child Day Care Branch of Family Services, the Home Economics Branch of the Department of Agriculture and the Manitoba Women's Directorate met to consider the Federated Women's Institutes of Canada Rural Child Care Survey Project 1990, and to draft a model suitable for a pilot project in Manitoba.

Background:

The Federated Women's Institutes of Canada (FWIC) is a coordinating body for the ten provincial organizations. In 1989-90, the FWIC obtained funding from the Federal Government Child Care Initiatives Fund to conduct a survey across Canada to determine the child care needs of rural families.

Rural areas need a different solution to child care problems than do urban centres. A number of factors contribute to the differences in rural requirements:

- lower family incomes;
- farm partners with off-farm jobs;
- seasonal nature of needs;
- unpredictable working hours;
- child care requirements at times/days not normally served by traditional day care centres; and
- too few children to sustain day care centres.

The FWIC report suggested that governments need only play a facilitating role in setting up a registry and supporting communities in finding their own creative solutions to individual communities specific problems.

THE ALBERTA RURAL CHILD CARE PILOT PROJECT:

Rural Child Care concerns have recently been addressed by the Alberta Government. In March, 1991, the Alberta Women's Institutes were approached to become the lead organization on an Alberta Rural Child Care Study. They formed a coalition of four Alberta women's groups and received $75,000 from the Alberta Lottery Fund to undertake the "Alberta Rural Child Care Pilot Project". The purpose of the project was to implement and evaluate a variety of child care projects on Alberta farms.

All of the pilot projects had some form of registry. One project had provision for either the children or the care-giver to ride on the local school bus. Another provided for child care sharing with the care-givers listed through a central registry. In some cases, care was provided in the home of the care-giver while others arranged for the care-giver to go to the home(s) of the family requiring the care.

Projects were chosen on the basis of:

- need;
- uniqueness of approach;
- extent of community involvement;
- potential for success; and
- possibility for continuation after the pilot project (viability).

Initially, seven pilot projects were approved, and have been completed. Twelve more are currently underway. A final report on these pilots should be available in June.

Sixty-five percent of child care costs were paid by the project based on a maximum subsidy of $4.00 per hour per family. Users paid the other 35%.

There were no qualification requirements for care givers. No employee benefits or subsidies were paid for full time or live in workers.

Note: Alberta does not have nearly as stringent regulations regarding child care as does Manitoba.

REQUIREMENTS AS PRESENTED BY THE MANITOBA WOMEN'S INSTITUTE:

- Registry of names of people available on short notice and during non-traditional hours to provide child care for farm families.

- Registrants to provide child care in the families' homes.

- Individual users to contact reigstrants directly.

- Users to negotiate remuneration directly with care-giver. For work situations of this nature, no minimum wage standards are required.

NOTE: To date, no request for subsidy has been made by the Manitoba Women's Institute.

EXISTING COMPARABLE CHILD CARE PROGRAMS IN THE PROVINCE:

CHILD MINDER PROGRAM

In considering the request made by the Manitoba Women's Institute, existing government programs were assessed to determine whether they would meet the stated needs. While no program specifically fitted the requirements, the Child Minder Program came closest to meeting the requirements of farm families.

Features of the Child Minder program:

Child Minders provide assistance to families who require off-hour care where no established program exists to provide the service. It is most often provided to families who require special assistance to remain functional.

The Child Minder:

- must complete a first aid course;
- must be at least 18 years of age;
- must complete an investigation authorization form so that Child Day Care can institute a Criminal Records Check and Child Abuse Registry Check;
- is considered self-employed; and
- is provided with a fire and safety kit to take to the home. (The kit contains a First Aid Kit, Fire Extinguisher, Portable Smoke Detector and a Flashlight. There may also be some toys, books and activity suggestions in the kit.)

Limitations of the Child Minder Program:

1. It is a small, labour-intensive program operated by the Child Day Care Branch. From the government's perspective, the Child Minder Program, while small, is fully subsidized by government, and if more widely applicable, would have significant cost implications.

2. First aid courses are not readily available in all rural areas.

3. Limiting care-givers to over 18 years of age would exclude high school students, who would logically be a valuable source of registrants.

4. There is a clear, expressed intent that this be a community owned initiative and not a program managed by the Day Care Branch. Government assistance requested was to be in the form of facilitating the establishment of a Registry.

While, as previously stated, the Women's Institute has not requested a subsidized program, they are aware of the existence of the Child Minder Program.

MANITOBA YOUTH JOB CENTRE PROGRAM

The Manitoba Youth Job Centre (MYJC) program operates throughout the province in 34 locations. It places students/youth in jobs in communities in rural and northern Manitoba through a job registry which local employers can access. As it is geared towards employing students while they are not attending schools, it could continue to place students in positions as care-givers for farm families during seeding and harvesting. It places high school, community college and university students.

The MYJC's are operational from May 11 to August 14, 1992. They register students at schools, community colleges and universities.

The MYJC Managers undergo a training program the week of May 5. The casual Child Care Registry could be elaborated on during the training program so that students who wish to register for this purpose may do so. Note: Many students have been involved in providing this type of casual care through the MYJC's in previous years.

Limitations of Manitoba Youth Job Centre Program Registries:

1. The majority of high school and community college students taking child care worker training programs would not be available for seeding and harvesting as the school year ends June 30 and commences on September 1.

2. The sporadic nature of the employment as well as low wages may not be of interest to many university students who work over the summer to defray tuition costs.

3. The Opposition may be critical of government for encouraging unlicensed child care for rural farm families. They may say that the Government is encouraging "second-class care" for farm families.

4. Child care member associations may be critical of government for condoning unlicensed care for farm families, particularly with the low enrolments being experienced in day care centres at the current time.

5. Many farm families wishing to hire a care-giver from the registry may not be able to afford to do so without a government subsidy. Subsidy is currently not available in unlicensed facilities.

AGRICULTURAL EMPLOYMENT SERVICES BRANCH DOMESTIC WORKERS

The Agricultural Employment Services Branch of the Department of Agriculture administers a network of six Agriculture Employment Services Boards throughout the province. The Boards maintain a registry of available farm workers and act as a referral service to individual farmers requiring seasonal employees.

A project entitled Employment Services Branch 'Domestic Child Care Program', (see Appendix) was recently piloted in Brandon, through the Agricultural Employment Services Branch. The objective of the pilot was to enlist "agricultural domestic workers" to work in and around the farm site i.e. to take over the duties of the spouse who was working on machinery or other farming activities, during peak periods of activity on the farm. These domestic workers looked after children, took meals to fields, etc. thus replacing the work of the spouse.

The rationale for hiring a replacement for the spouse as opposed to hiring a labourer to operate machinery was:

1. There was great difficulty in obtaining temporary workers who were skilled enough to operate the valuable and complicated machinery involved in farming activities. Frequently the spouse was sufficiently familiar with the farming operation to operate the machines and perform other related tasks but was fully occupied with domestic responsibilities including child care.

2. Not only were capable people available in the rural communities to temporarily perform the work of the spouse, but at a significantly lower cost than hiring farm labourers.

Note: This model of providing replacement workers for the farm spouse is currently under consideration by the Federal/Provincial Agriculture Employment Services Board, and is scheduled to be an agenda item at the Women's Caucus section at their Conference in Saskatoon this June.

This particular model is also being considered by the Province of Quebec.

Limitations of Agricultural Services Board Registries:

1. While the pilot project proved to be quite successful in the farming community, it did meet with some resistance from the local Agricultural Employment Services Board, which tended to take a traditional, narrower view of farm employment.

2. In order for the Agricultural Employment Services Board model to be effective, a stronger communications and marketing strategy would have to be developed.

ELEMENTS OF PROPOSED MODEL:

THE REGISTRY:

Registry of Names - two streams

- 18 years and over - with satisfactory Criminal Records Check and subject to Child Abuse Registry Check;
- under 18 years - subject only to Child Abuse Registry check;
- registrants to be considered self-employed; and
- terms of employment to be negotiated between parent and registrant.

Development of a sample Self-Declaratory application form designed to elicit useful information including:

- Where to send the application
- Qualifications of applicant i.e.
  - First Aid Training
  - Baby-Sitting Courses
  - Farm Safety Courses
- When available and for which communities
- Release section for Criminal Records Check
- Child Abuse Registry Check - individual registrant would provide release to Child and Family Services to conduct the check.
- Criminal Records Check - should be conducted through local RCMP offices as it would take four to six weeks to do a check through the Central office. A protocol would have to be established in order to ensure consistency of checking methodology at the local level.

- Government officials could initiate contact with Central RCMP office in Winnipeg, to request their cooperation in support of this initiative.

Maintenance of Registry - two streams

- Under 18 years of age - Manitoba Youth Job Centre Program (There are 34 MYJC offices located throughout the province.)

- Over 18 years of age - Manitoba Agricultural Employment Service Board. (There are 6 Manitoba Agricultural Employment Services offices around the province.)

Access to Registry by users

- Parent calls local registry office

- Office gives the parent names and numbers of registrants.

Access to Registry by Potential Care Givers

- Individual registrant contacts Registry office(s)

- Registry office(s) forward application form on request

Note: The Agricultural Employment Services Branch has expressed support for promoting the inclusion of domestic workers on the local Agricultural Employment Services Board Registries.

PILOT LOCATION CRITERIA:

In order to give a sufficiently broad spectrum to evaluate the project effectively and to ensure a population that includes a high percentage of young farm families, it is proposed that three sites representing a wide geographic spread be selected.

- Communities located in regions serviced by Manitoba Youth Job Centre Program and a Manitoba Agricultural Employment Services office:

- One community that has articulated its need for innovative Rural Child Care to the Department of Agriculture - eg. Solsgirth;

- One farming community considered self-sufficient in terms of ability to pay for child care - eg. Minnedosa; and

- One farming community currently dependent on subsidy for existing child care services - eg. Ashern.

Note: Final determinations to be made in consultation with the appropriate Directors of the programs involved and the Manitoba Women's Institute.

COMMUNICATIONS STRATEGY:

- Participation by appropriate provincial staff in the MYJC's training program week to emphasize the requirements of farm families respecting child care.

- Provision of support to the Agricultural Employment Services Branch in its efforts to promote the inclusion of domestic workers on the local registries maintained by the Agricultural Employment Services Boards.

- Supply of information bulletins to local schools, youth groups, community colleges, universities, Manitoba Society of Seniors, to recruit registrants

- Requests to above to place bulletins in newsletters of their organizations where feasible

- Request government departments to publish information and articles to publicize the projects. e.g. The Women's Directorate, Education and Training

- Information bulletins posted in above locations plus local Agricultural offices, Home Economists' offices, municipal and appropriate provincial offices

- Information provided to all identifiable community contacts, asking them to "spread the word"

- Information to local newspapers for advertisements and feature stories

- Press conference held by Women's Institute, if appropriate, to announce pilot projects

EVALUATION OF PROJECT:

- As this is a community initiated project, it is proposed that the evaluation be undertaken by the Women's Institute;

- The Women's Institute would likely be eligible to apply to Child Care Initiatives Fund for a grant to evaluate the program.

- A meaningful evaluation could include:

- response to pilot - quantitative, i.e. numbers of users and registrants, and qualitative, i.e. satisfaction with program by both users and registrants

- costs

- problems - users and registrants, administrative

- recommended modifications or changes

- determination of the need for continuation

- identification of needs in other communities

FINANCIAL REQUIREMENTS:

- Financial requirements for launching pilots are anticipated to be minimal. Local newspapers could be informed of the projects via an information bulletin. Similarly, the sample application form could be developed in-house.

- Some cost may be involved if a mail-out campaign is utilized to publicize the pilots.

- The Child Abuse Registry Check could be performed by Child and Family Services. Long term, this could involve significant use of staff time.

EXPECTATIONS/IMPLICATIONS OF PROPOSED MODEL AND PILOT:

- Will meet requirements of farm families who have variable child care needs (seeding, harvesting) and who can afford to pay;

- May impact negatively on existing child care facilities and/or home day care providers;

- Expectations may well be created regarding program continuation after pilot projects have concluded; if highly successful, wider demand may be created in other communities and doubtless, the demand for subsidy.

- Given the economic crisis facing many farm families, demand for subsidies could well be significant;

- If it is anticipated that ultimately some subsidies may have to be made available, consideration must be given to the issue of paying subsidies for a program that does not meet all legislated standards for child care.

- If the program is highly successful and proves to be model that could be extended, the Manitoba Women's Institute should be encouraged to apply to the federal Child Care Initiatives Fund for funding for the 1993 seeding and harvesting year.

Appendix B

Questionnaire

Covering Letter

March 2, 1994

Dear Manitoba Farmer,

Your name and address were randomly selected from the Manitoba Rural Municipality Assessment Rolls to participate in this survey of child care and child safety among farm families. This survey is being conducted in co-operation with the Rural Development Institute at Brandon University and with support from the Manitoba Women's Institute. Because the Assessment Rolls do not include information on families and children, you may have received this questionnaire even though you do not have children living on your farm. If this is the case, we would greatly appreciate if you would pass this survey on to a farm family with children under 16 years of age.

If you have children under 16 years of age, we ask your cooperation with this survey. After completing this questionnaire, kindly enclose it in the self-addressed, stamped envelope and mail by March 21. We ask that you **do not put your name or address on this questionnaire** because we want your responses to remain anonymous.

Thank you very much for your assistance. If you have questions or concerns regarding this survey, you may call me at 1-269-6899.

Sincerely yours,

Lois M. Brockman, Ph.D.

CONFIDENTIAL (when completed)

FARM FAMILIES: CHILD CARE AND SAFETY

Please check the appropriate boxes [] and fill in the blanks.

PART A

This part of the survey asks about your farm operation and the non-farm employment of you and your spouse.

A1. **How would you best describe your farming operation?**

- ☐ grain and oil seeds
- ☐ mixed
- ☐ dairy
- ☐ feeder cattle
- ☐ cow/calf
- ☐ PMU farming
- ☐ feeder hog
- ☐ hog farrow to finish
- ☐ poultry
- ☐ other, specify _____

A2. **How many acres, including rented land, did you have in active production in 1993?** _____ acres

A3. **How many people operated machinery on your farm in 1993?** _____ operators

A4. **On average, about how many hours a week did you and your spouse work on the farm during the winter (November to March) and summer months (May to September) last year?**

Your on farm work		Your Spouse's on farm work (if applicable)	
Winter	_____hours a week	Winter	_____hours a week
Summer	_____hours a week	Summer	_____hours a week

A5. **In 1993, did you at any time work for pay off the farm?**

☐ Yes ☐ No IF NO, GO TO QUESTION A9.

A6. **If yes, was this a regular job?**

☐ Yes ☐ No IF NO, GO TO QUESTION A8.

A7. **If yes, about how many hours a week did you work at this job?**

- ☐ less than 8 hours
- ☐ 9 - 16 hours
- ☐ 17 - 32 hours
- ☐ 33 - 40 hours
- ☐ more than 40 hours

GO TO QUESTION A9.

A8. **If your paid work off the farm was not a regular job, check the months in which you spent time at this job in 1993 and indicate the approximate number of hours for each month.**

☐ January	_____ hours	☐ May	_____ hours	☐ September	_____ hours
☐ February	_____ hours	☐ June	_____ hours	☐ October	_____ hours
☐ March	_____ hours	☐ July	_____ hours	☐ November	_____ hours
☐ April	_____ hours	☐ August	_____ hours	☐ December	_____ hours

A9. **Did your spouse work for pay off the farm at any time in 1993?**

☐ Yes ☐ No IF NO OR YOU HAVE NO SPOUSE, GO TO QUESTION A13.

A10. **If yes, was your spouse's work a regular job?**

☐ Yes ☐ No IF NO, GO TO QUESTION A12.

A11. **If yes, about how many hours a week did your spouse work at this job?**

- ☐ less than 8 hours
- ☐ 9 - 16 hours
- ☐ 17 - 32 hours
- ☐ 33 - 40 hours
- ☐ 40 hours or more

GO TO QUESTION A13.

A12. **If your spouse's paid work off the farm was not a regular job, check the months in which your spouse spent time at this job in 1993 and indicate the approximate number of hours for each month.**

☐ January	_____ hours	☐ May	_____ hours	☐ September	_____ hours
☐ February	_____ hours	☐ June	_____ hours	☐ October	_____ hours
☐ March	_____ hours	☐ July	_____ hours	☐ November	_____ hours
☐ April	_____ hours	☐ August	_____ hours	☐ December	_____ hours

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A13. **In 1993, approximately what percent of your family's total net income was from farming?**

- ☐ 0 - 25%
- ☐ 26 - 50%
- ☐ 51 - 75%
- ☐ 76 - 100%

A14. **In 1993, about how many hours a month were you and your spouse engaged in volunteer activities?**

Your monthly volunteer time	Your spouse's monthly volunteer time
☐ less than 5 hours	☐ less than 5 hours
☐ 5 - 9 hours	☐ 5 - 9 hours
☐ 10 - 15 hours	☐ 10 - 15 hours
☐ more than 15 hours	☐ more than 15 hours

A15. **In 1993, did you have hired help on your farm?**

☐ Yes ☐ No IF NO, GO TO QUESTION A17.

A16. **If yes, was this hired help employed**

- ☐ on a regular basis? ☐ full time ☐ part time
- ☐ on a seasonal basis? ☐ During which months?_____

A17. **How many miles is your farm from:**

- the school your children attend? _____ miles
- the centre where you shop for groceries? _____ miles
- the nearest hospital? _____ miles
- the nearest doctor or medical centre? _____ miles
- the nearest farm supply centre? _____ miles
- the nearest fire station _____ miles
- the nearest ambulance service? _____ miles
- if employed off the farm, from your place of employment? _____ miles
- if your spouse was employed off the farm, from his/her place of employment? _____ miles

A18. **In 1993, how did your child(ren) get to and from school?**

- ☐ walked
- ☐ by school bus
- ☐ other, specify _____
- ☐ driven by parents
- ☐ car pool arrangement

A19. **What kind of arrangement did you have for your child(ren) during lunch time?**

- ☑ stayed at school for lunch program
- ☐ stayed at school with lunch from home
- ☐ went home to a parent or caregiver
- ☐ went to a caregiver outside the home (relative or nonrelative)
- ☐ went home on their own
- ☐ were enroled in a lunch program outside of school
- ☐ other, specify _____

PART B In this part of the survey you are asked about your children and members of your household.

B1. **Starting with your youngest child, indicate below the sex, birthdate, and whether he/she attended school or kindergarten (K) between January and June, 1993. If any of your children have a long-term condition or health problem, indicate the type of condition in the last column.**

	Sex	Birthdate		Attended School in June, 1993			Condition or Health Problem
		Month	Year	Yes	No	Grade	
Child # 1	___	_____	_____	☐	☐	_____	_____
Child # 2	___	_____	_____	☐	☐	_____	_____
Child # 3	___	_____	_____	☐	☐	_____	_____
Child # 4	___	_____	_____	☐	☐	_____	_____
Child # 5	___	_____	_____	☐	☐	_____	_____
Child # 6	___	_____	_____	☐	☐	_____	_____
Child # 7	___	_____	_____	☐	☐	_____	_____

IF NONE OF YOUR CHILDREN HAVE A LONG-TERM CONDITION OR HEALTH PROBLEM, GO TO B4.

B2. **Does this child's condition or health problem limit your farming activities?**
☐ Yes ☐ No

B3. **Does this child's condition or health problem limit the kind of off-farm work you or your spouse can do?**
☐ Yes ☐ No

B4. **Aside from your children and spouse, list any other persons who regularly lived in your home in 1993.**

Sex	Age	Relationship
___	_____	_____
___	_____	_____
___	_____	_____
___	_____	_____

B5. **Do non-farm children visit your farm to play with your children?**
☐ Yes ☐ No

PART C Because farming responsibilities are varied, the needs of farm families for child care are unique. The following section asks about the child care arrangements you used for your children in 1993.

C1. **In 1993, did you know about the Rural Child Care Safety Registry?**
☐ Yes ☐ No IF NO, GO TO QUESTION C4.

C2. **If yes, did you use the Rural Child Care Registry?**
☐ Yes How frequently? _____times
☐ No IF NO, GO TO QUESTION C4.

C3. **If yes, did you find this service satisfactory?**
☐ Yes ☐ No
Why or why not? _____

C4. **In 1993, did any of your children spend any time in a day care centre including before and after school day care?**
☐ Yes Which child(ren)? Number of child from Question B1: _____, _____, _____.
☐ No IF NO, GO TO QUESTION C9.

C5. **How far was the day care from your home?** _____miles

C6. **On average, for how many hours a week was your child(ren) in this day care?** _____hours

C7. **Is this day care operated by or affiliated with** (check /)
☐ a municipal government?
☐ a school, college or university?
☐ a church?
☐ a community agency?
☐ a parent co-operative in which you contribute unpaid hours of work?
☐ an individual or group for profit?
☐ other? (specify) _____

C8. **Did this child care arrangement meet your needs?**
☐ Yes ☐ No Why or why not?_____

C9. **In 1993, did any of your children attend a group program other than day care such as 4H, sports, etc?**

☐ Yes Which child(ren)? Number of child from Question B1: _____, _____, _____.
☐ No IF NO, GO TO QUESTION C12.

C10. **How far was this group program from your home?** _____miles

C11. **On average, how many hours a week did your child(ren) attend this program?** _____hours

C12. **In 1993, were any of your children regularly in the care of a relative, neighbour, friend, or babysitter?** Do not include care provided by your spouse or an older brother or sister.

☐ Yes Which child(ren)? Number of child(ren) from Question B1: _____, _____, _____.
☐ No IF NO, GO TO QUESTION C16.

C13. **On average, how many hours a week was your child(ren) cared for by this person?** _____ hours

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C14. **Where did this person provide the care?**
☐ in your home ☐ in her/his home

C15. **Did this child care arrangement meet your needs?**
☐ Yes ☐ No
Why or why not?_____

C16. **In 1993 during peak times such as seeding, haying, harvesting, calving, etc. did you use any of the following types of child care?** (Check all those used.)

☐ day care centre
☐ licensed family day care home
☐ care by a relative other than your spouse or an older sibling in your home
☐ care by an older brother or sister in your home
☐ care by a relative in her/his home
☐ care by a non-relative in your home
☐ care by a non-relative in her/his home

C17. **During which of the peak times did you use this form of care?**

	About how many days?	On average, how many hours a day?
☐ seeding	_____	_____
☐ haying	_____	_____
☐ harvesting	_____	_____
☐ calving/farrowing	_____	_____
☐ other	_____	_____

Specify other peak times_____

C18. **How did you learn of the availability of this care for your child(ren) during peak times?**

☐ the caregiver is a relative, friend or neighbour you could ask to care for your children
☐ from advertisements in newspaper or community bulletin boards
☐ through the Rural Child Care Safety Registry
☐ was recommended by a friend or neighbour
☐ through your church or school
☐ other, specify _____

C19. **Did your child care arrangements during peak times meet your needs?**
☐ Yes ☐ No
Why or why not?_____

C20. **If you did not use child care services in 1993, check the main reason why you did not.**
☐ not available
☐ not needed or wanted
☐ insufficient spaces
☐ too far to travel
☐ too costly
☐ time when available was not suitable
☐ no transportation
☐ other reason, specify_____

C21. **If fee subsidies were available, would you use a child care service?**
☐ Yes ☐ No IF NO, GO TO QUESTION C23.

C22. **If yes, what form of child care would you prefer?** _____

C23. **In 1993, did you find it necessary to take your child(ren) under age 13 years with you while working with farm machinery or tending to farm chores?**

☐ Yes About how often in a month? _____times
☐ No

C24. **In 1993, did your spouse find it necessary to take your child(ren) under age 13 years along while working with farm machinery or tending to farm chores?**

☐ Yes About how often in a month? _____times
☐ No

C25. **In 1993, were there times when it was necessary to leave your child(ren) under age 13 years on their own while you and your spouse worked?**

☐ Yes ☐ No About how often in a month? _____times

C26. **If cost were not a factor, describe the form of child care arrangement that would best meet the needs of your family?**

_____
_____
_____

PART D Concerns regarding the safety of children vary with the type of situation and the age of children.

D1. **The farm environment presents situations which raise concerns for parents. At any time in 1993 were you concerned about the safety of your children under age 16 years in the following situations?**

Check the level of concern you experienced.

	Extreme Concern	Great Concern	Moderate Concern	Slight Concern	No Concern at All	Not applicable
slippery floors and walkways	☐	☐	☐	☐	☐	☐
noise levels around machinery	☐	☐	☐	☐	☐	☐
herbicides, pesticides or barn chemicals	☐	☐	☐	☐	☐	☐
leaving your younger child(ren) in the care of an older child	☐	☐	☐	☐	☐	☐
the children's play area	☐	☐	☐	☐	☐	☐
the farm entrance road to the main road	☐	☐	☐	☐	☐	☐
the farm dugout, ponds or manure lagoon	☐	☐	☐	☐	☐	☐
overhead powerlines	☐	☐	☐	☐	☐	☐
power-take-off equipment	☐	☐	☐	☐	☐	☐
children playing near large machinery	☐	☐	☐	☐	☐	☐
hay, straw and feeder chutes	☐	☐	☐	☐	☐	☐
ladders to grain bins and feed storage	☐	☐	☐	☐	☐	☐
taking child(ren) with you on the tractor	☐	☐	☐	☐	☐	☐
taking child(ren) with you while tending large animals	☐	☐	☐	☐	☐	☐
the operation of the grain auger	☐	☐	☐	☐	☐	☐
grain bins or gravity wagons	☐	☐	☐	☐	☐	☐
the operation of the grain dryer	☐	☐	☐	☐	☐	☐
leaving child(ren) on their own while you attended to farm chores	☐	☐	☐	☐	☐	☐
your personal level of stress	☐	☐	☐	☐	☐	☐
your spouse's level of stress	☐	☐	☐	☐	☐	☐

D2. **Circle the youngest age at which you think it is safe to allow an average child:**

	Years of Age														
to drive a tractor greater than 20 horsepower?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to mow the grass on a riding mower?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to mow grass with a push-type power mower?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to ride with an adult on a tractor with a cab?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to ride with an adult on a cabless tractor?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to drive a half-ton truck on the farm or fields?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to drive a combine?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to operate a power-take-off?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to operate a grain auger?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to play alone in the farmyard?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to handle large animals such as cows, hogs?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to handle small animals such as chickens?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to milk cows?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to care for a child under one year of age?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to care for a child 2 - 4 years of age?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to be left on his/her own in the home?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to use the microwave unattended?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to drive a snowmobile?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to ride as a passenger on a snowmobile?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
to drive an all-terrain vehicle (ATV)?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

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D3. **Would you be interested in having any of the following types of safety programs in your community?** Check your level of interest.

	Very interested	Somewhat interested	Not interested at all
Rural Child Care Safety Registry	☐	☐	☐
Farm Safety Day Camps for Children	☐	☐	☐
Agri-chemicals Safety	☐	☐	☐
Age Appropriate Tasks for Children	☐	☐	☐
Safety Education Videos	☐	☐	☐
ATV Youth Training Program	☐	☐	☐
Child Care Workshops	☐	☐	☐

Describe any other concerns you may have had in 1993 about the care and safety of any of your children.

_____

_____

_____

PART E

The purpose of this part of the survey is to provide some information about yourself and your spouse. Check (/) the appropriate answers.

E1. **Your gender**: ☐ Male ☐ Female

E2. **Your age**

☐ under 25 years
☐ 25 - 34 years
☐ 35 - 44 years
☐ 45 - 54 years
☐ 55 - 64 years
☐ 65 years or over

E3. **Marital status** ☐ Married ☐ Single/Divorced/Widowed

E4. **Please indicate the highest education level of you and your spouse.**

Self

☐ Grade school
☐ High school
☐ Some postsecondary
☐ College diploma or certificate
☐ University degree

Spouse

☐ Grade school
☐ High school
☐ Some postsecondary
☐ College diploma or certificate
☐ University degree

COMMENTS AND SUGGESTIONS ARE WELCOME

_____

_____

_____

YOUR CONTRIBUTION TO THIS SURVEY IS GREATLY APPRECIATED. THANK YOU.

Results of this survey will be provided to farm newspapers.

A complete report will be published by the Rural Development Institute, Brandon University.

Appendix C

Municipalities Included in the Survey Sample

The survey sample was randomly selected from the following Municipalities in Manitoba.

- Bifrost
- Brokenhead
- Coldwell
- Dauphin
- DeSalabury
- Glenella
- Grahamdale
- Hanover
- Hillsburg
- Lakeview
- Lorne
- Louise
- Minitonas
- North Norfolk
- Portage la Prairie
- Rhineland
- Rockwood
- Saskatchewan
- Shell River
- Springfield
- Stanley
- Swan River
- Turtle Mountain
- Wallace
- Whitemouth

- Glufka, Roger, 1992. *Human Intervention in the Water Quality of the Clear Lake Basin, Riding Mountain National Park.* RDI Report Series, 1992-4, The Rural Development Institute, Brandon University, Brandon, MB, 17 pp. ($6.35).

- Curle, Robert and Richard C. Rounds. 1992. *Impact of Non-Resident Land Ownership and Permanent Recreational Development in Traditional Farm Areas.* RDI Report Series 1992-3, The Rural Development Institute, Brandon University, Brandon, MB, 41 pp. ($8.49).

- Maltby, Hendrika. 1992. *Midwifery in Manitoba: An Exploratory Study.* RDI Report Series 1992-2, The Rural Development Institute, Brandon University, Brandon, MB, 40 pp. ($8.49).

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- Tracy, Michael, editor. 1991. *Farmers and Politics in France.* The Arkleton Trust, The Aspen Institute for Humanistic Studies and Canadian Agricultural and Rural Restructuring Group, Bookmag, Scotland, U.K. 120 pp. ($24.54 Cdn; $24.00 U.S.).

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